

ADDRESSES

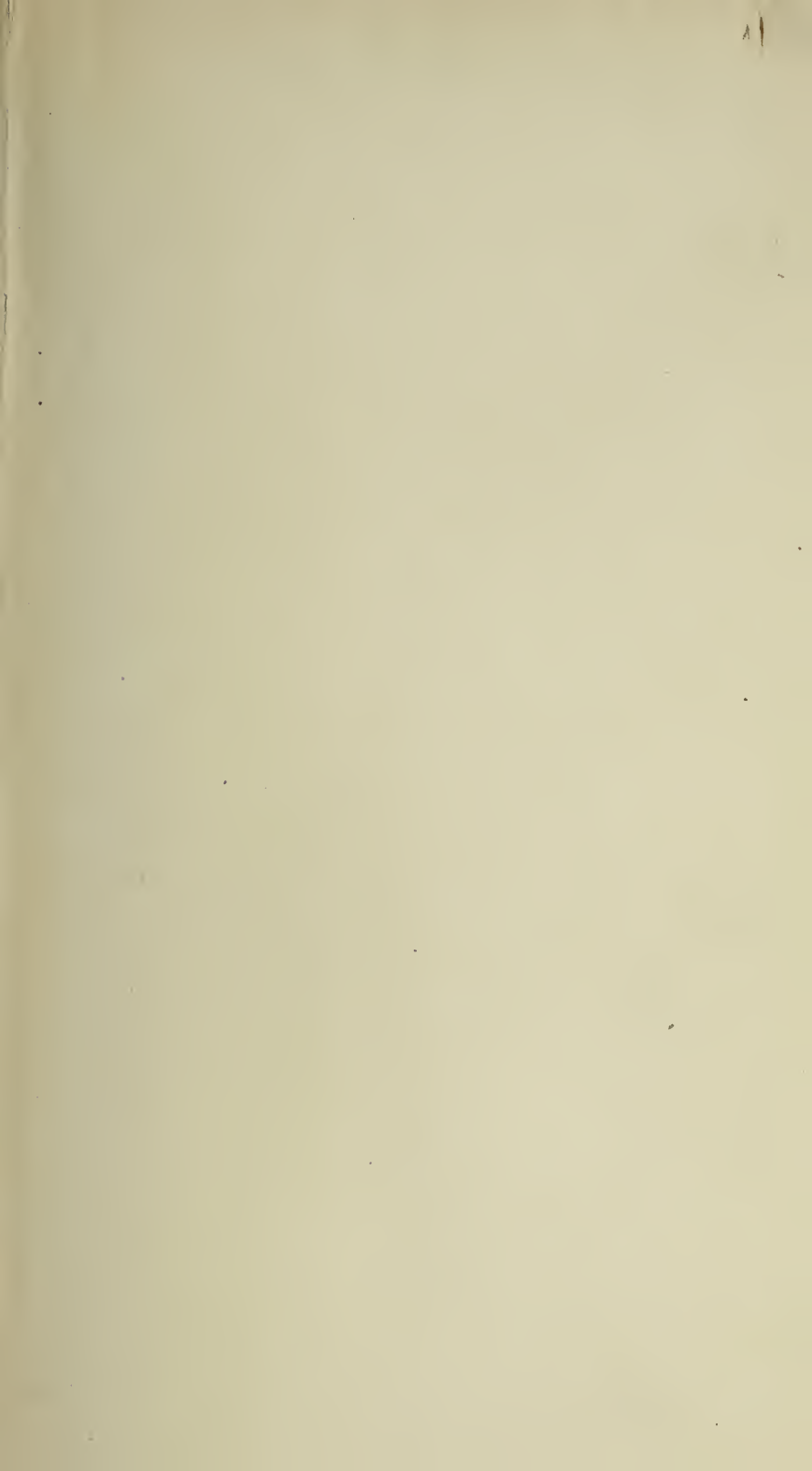
AT THE


DE LESSEPS BANQUET,

GIVEN AT DELMONICO'S,

MARCH 1, 1880.

NEW YORK :
D. APPLETON AND COMPANY,
1, 3, AND 5 BOND STREET.
1880.





Digitized by the Internet Archive
in 2017 with funding from
University of Illinois Urbana-Champaign Alternates

ADDRESSES

AT THE

DE LESSEPS BANQUET,

GIVEN AT DELMONICO'S,

MARCH 1, 1880.

NEW YORK:
D. APPLETON AND COMPANY,
1, 3, AND 5 BOND STREET.
1880.

386

A22

THE
LIBRARY OF THE
MUSEUM OF NATURAL HISTORY
AND
ZOOLOGY
OF THE
SMITHSONIAN INSTITUTION
WASHINGTON, D. C.

A LARGE number of the leading merchants, professional men, and prominent citizens of New York, desirous of doing honor to the genius of Count Ferdinand de Lesseps, both for the great work which he has accomplished, and also for that which, late in life, he has so intrepidly undertaken, united in extending to him a cordial invitation to a public banquet, on his arrival from Panama. The invitation being accepted, it was arranged that the dinner should take place on March 1st, at Delmonico's.

The Committee of Arrangements consisted of Messrs. Algeron S. Sullivan, Alexander S. Holley, Abram S. Hewitt, George W. Carleton, and John Bogart, and, under the admirable management of these gentlemen, the banquet was in all respects a brilliant success.

The dining-room was superbly decorated. The walls were decked with the flags of various countries—the United States, France, Colombia, Peru, Bolivia, and other South and Central American states. There was a profusion of flowers tastefully displayed, and the tables were ornamented with numerous artistic devices, representing prominent incidents in the career of the distinguished gentleman to whose character and enterprise the occasion was made a cordial tribute.

The Rev. Dr. Richard S. Storrs presided, and, when justice had been done to the sumptuous dinner, he opened the speaking by an eloquent, appropriate, and instructive address. He was

followed by other gentlemen, whose remarks were characterized by thorough appreciation of the great interests represented by the illustrious guest, and the most cordial admiration of that force of character which he has directed to large and noble purposes.

Whatever may be the result of M. de Lesseps's efforts to carry out a grand work in the interests of civilization, which all maritime nations for three centuries have regarded as in the highest degree desirable, one thing is certain, his visit to this country for its promotion will be a memorable event in the history of the enterprise. It seems, therefore, appropriate that some record should be preserved of those interesting and significant expressions with which M. de Lesseps was welcomed at the New York banquet. The newspaper reports being imperfect, nearly all the addresses herewith published have been carefully revised by their authors.

THE DE LESSEPS BANQUET.

INVITATION TO COUNT DE LESSEPS.

NEW YORK, *December 27, 1879.*

TO M. FERDINAND DE LESSEPS :

SIR : We learn with profound pleasure that you will soon visit this city.

The eminent distinction awarded to you by your profession throughout the world, the important service your engineering and executive ability has rendered to universal commerce and civilization, in the inception and completion of the Suez Canal, your conspicuous enterprise in a work not less important to America and to the world—the construction of an American interoceanic canal—these combine in prompting us to offer to you personally an honorable tribute and a cordial welcome.

But we also, as American citizens, avail ourselves of this occasion to acknowledge that genius and that scientific progress of France which are alike honorable to your country and beneficent to humanity.

We have the honor to request that, at a day to be named, soon after your arrival, you will, with other guests, meet us at a public dinner, when we can assure you of our high personal esteem, and of our cordial friendship for your beloved country.

We have the honor to subscribe ourselves, respectfully and sincerely,

Your friends and obedient servants,

W. H. APPLETON,	LE GRAND B. CANNON,	WALTON W. EVANS,
HENRY H. ANDERSON,	CHARLES F. CHANDLER,	JOHN ELDERKIN,
JOHN T. AGNEW,	F. E. CHURCH,	JOHN H. FLAGLER,
D. F. APPLETON,	W. C. CHURCH,	M. N. FORNEY,
H. E. ALEXANDER,	L. B. DE CESNOLA,	ALBERT FINK,
EDWARD D. ADAMS,	S. S. CONANT,	EMERSON FOOTE,
MIGUEL DE ALDAMA,	ELIE CHARLIER,	DAVID DUDLEY FIELD,
W. W. APPLETON,	JAMES H. CHOATE,	AUSTIN FLINT, Jr.,
SAMUEL D. BABCOCK,	JAMES R. CROES,	GEORGE H. FROST,
S. L. M. BARLOW,	S. WILKINS CRAGG,	DAVID C. FERRIS,
F. A. P. BARNARD,	G. W. CARLETON,	CHARLES G. FRANKLYN,
JOHN R. BRADY,	ANDREW CARNEGIE,	Gen. CLINTON B. FISKE,
GEORGE C. BARRETT,	W. E. CURTIS,	W. H. GUION,
HENRY W. BELLOWES,	ECKLEY B. COYE,	CHAS. R. GRAHAM,
JOHN BOGART,	CHARLES H. CRAMP,	CHESTER GRISWOLD,
FORDYCE BARKER,	MELVIN M. COHEN,	Q. A. GILLMORE,
HENRY WARD BEECHER,	ORESTES CLEVELAND,	GEO. S. GREENE, Jr.,
CYRUS BUTLER,	MARTIN CORYELL,	SANFORD R. GIFFORD,
E. T. BELL,	D. G. CROLLY,	FRANKLIN B. GOWEN,
G. S. BEDFORD,	F. COLLINGWOOD,	JOHN H. GAFNEY,
ISAAC BAILEY,	W. B. COGGSWELL,	F. G. GEDNEY,
JULIUS BIEN,	NOAH DAVIS,	WILLIAM G. HUNT,
JAS. A. BURDEN,	EUGENE DUTILLE,	HENRY HILTON,
JOHN M. BURKE,	C. DONOHUE,	ABRAM S. HEWITT,
ALBERT BIERSTADT,	THOMAS DICKSON,	ALEX. L. HOLLEY,
M. H. BLOODGOOD,	JOHN F. DILLON,	JOHN HOEY,
E. A. BUCK,	W. B. DINSMORE,	HUGH J. HASTINGS,
J. TOWNSEND BURDEN,	W. E. DODGE,	F. W. J. HURST,
FREDERICK BILLINGS,	GEORGE W. DRESSER,	W. G. HAMILTON,
GORDON W. BURNHAM,	W. E. DODGE, Jr.,	D. HUNTINGTON,
N. M. BECKWITH,	W. BUTLER DUNCAN,	RUFUS HATCH,
JACKSON BAILEY,	W. C. DREYER,	HENRY L. HOGUET,
LOUIS DE BEBIAN,	V. DABNEY,	J. B. HOUSTON,
W. R. BUNKER,	Z. C. DEAS,	SAMUEL A. HAINES,
B. F. BRISTOW,	THOMAS M. DROWN,	SAMUEL E. HISCOX,
PETER COOPER,	E. B. DORSEY,	Jos. W. HARPER, Jr.,
WILLIAM A. COLE,	CHAUNCEY M. DEPEW,	H. L. HORTON,
HOWARD CROSBY,	EDWARD A. DICKERSON,	T. STERRY HUNT,
D. C. CALVIN,	THOMAS EGGLESTON,	GEO. A. HOYT,
OCTAVE CHAUNTE,	ISAAC W. ENGLAND,	HENRY HAVEMEYER,
ERASTUS CORNING,	W. J. EMMET,	ROBT. J. HOGUET,

BRAYTON IVES,	GEO. W. MAYNARD,	JACOB STOUT,
CHARLES H. ISHAM,	HON. A. T. MCGILL,	O. SPANNOCHIA,
MORRIS K. JESUP,	SAMUEL MARSH,	LEWIS A. SAYRE,
GEORGE JONES,	A. B. MILLER,	JAMES C. SPENCER,
JOHN JAY,	C. A. MARVIN,	THOS. A. SCOTT,
H. G. JEWETT,	ISAAC NEWTON,	WM. SELLERS,
THOS. L. JAMES,	F. O. NORTON,	F. G. SALMON,
JOHN P. JONES,	DR. J. S. NEWBERRY,	GEO. E. SIMPSON,
MCK. W. JONES,	JAS. G. O'DONOHUE,	E. A. SECCOMB,
E. S. JAFFAY,	DR. FESSENDEN N. OTIS,	C. STEWART SCHENCK,
FREDERICK M. KELLEY,	JOSEPH OGDEN,	C. A. SWEET,
WM. M. KINGSLAND,	GEO. H. POTTS,	JESSE SELIGMAN,
JOHN S. KENNEDY,	B. PERKINS,	ALLAN STIRLING,
EUGENE KELLY,	F. A. POTTS,	JOHN STEVENS,
SIGISMUND KAUFMAN,	S. IRENÆUS PRIME,	PROF. BENJ. SILLIMAN,
CLARENCE KING,	W. H. C. PRICE,	A. W. SPEIR,
JOHANNES KOOP,	TRENOR W. PARK,	G. M. SLADE,
AMBROSE KINGSLAND,	DR. HENRY C. POTTER,	L. TURNURE,
THOS. C. KEEFER,	RAPHAEL PUMPELLY,	STEVENSON TOWLE,
W. C. KINGSLEY,	JOHN K. PORTER,	JOHN P. TOWNSEND,
WALTER KATTI,	ARTHUR J. PEABODY,	W. H. TILLINGHAST,
A. A. LOW,	GEO. A. PETERS,	SAMUEL C. THOMPSON,
CHAS. LANIER,	WHEELER H. PECKHAM,	FRANK THOMSON,
L. M. LAWSON,	WILLIAM M. POLK,	DOUGLAS TAYLOR,
A. R. LAWRENCE,	THOS. PATTEN,	FREDERICK TAYLOR,
COL. E. P. C. LEWIS,	H. H. PORTER,	T. THORON,
E. LAUTERBACH,	A. W. PERRY,	HOOPER C. VAN VORST,
E. G. LINCOLN,	GEO. W. QUINTARD,	C. H. VAN BRUNT,
CHAS. C. LONG,	EDMUND D. RANDOLPH,	D. VAN NOSTRAND,
W. B. LEONARD,	GEO. H. ROBINSON,	A. J. VANDERPOEL,
CHAS. F. LIVERMORE,	R. W. RAYMOND,	J. VAN SCHAIK,
J. S. LOUBAT,	JOHN RILEY,	MARVIN R. VINCENT,
G. W. LESPINASSE,	HORACE RUSSELL,	S. V. WHITE,
CHARLTON T. LEWIS,	HENRY REMSEN,	JAS. F. WENMAN,
R. N. LAMBORN,	GUSTAVE RAYMOND,	WM. E. WORTHEN,
L. G. LAUREAU,	CHAS. RENAULD,	H. R. WORTHINGTON,
MORGAN J. PIERPONT,	R. G. ROLSTON,	SIDNEY WEBSTER,
HUGH MCCULLOCH,	MONCURE ROBINSON,	S. A. WALKER,
E. A. MERRITT,	ALBERT H. REITTINGER,	S. H. WALES,
CHAS. MACDONALD,	RUSSEL SAGE,	SAMUEL WARD,
CHAS. H. MARSHALL,	V. K. STEVENSON,	GEO. WILSON,
DR. HENRY MORTON,	A. S. SULLIVAN,	E. WINSLOW,
GEO. S. MORRISON,	DR. NOAH H. SCHENCK,	W. H. WHITNEY,
HON. HENRY C. MURPHY,	DR. RICHARD S. STORRS,	D. WILLIAMS,
JOHN MCGINNIS, JR.,	DAVID M. STONE,	F. S. WINSTON,
JOHN G. MCCULLOUGH,	J. J. SLOCUM,	JOS. M. WILSON,
CHAS. MUNZINGER,	FRANCIS A. STOUT,	E. L. YOUNG.

NAMES OF INVITED GUESTS.

DON JUSTO AROSEMENA,
Minister Plenipotentiary of Colombia.

HON. DON J. CARLO TRACY,
Chargé d'Affaires of Peru.

DON F. S. ASTA BURUAGA,
Minister Plenipotentiary of Chili.

DON VICENTE DARDON,
Minister of Guatemala and Salvador.

DON MANUEL M. DE ZAMACONA,
Minister Plenipotentiary of Mexico.

DON SIMON CAMACHO,
Appointed Minister of Venezuela.

SALVADOR DE MENDONCA,
Brazilian Consul-General.

HON. W. M. EVARTS.

Maj.-Gen. W. S. HANCOCK.

Maj.-Gen. J. M. SCHOFIELD.

Commodore NICHOLSON.

M. MAX OUTREY,
Minister from France to the United States.

M. EDMOND BREUIL,
French Consul-General.

HON. EDWARD COOPER.

Admiral DANIEL AMMEN.

Gov. A. B. CORNELL.

HORATIO ALLEN.

HON. C. P. DALY.

President NOAH PORTER,
Yale College.

President JAMES MCCOSH,
Princeton College.

WALTER McMICHAEL,
Editor Philadelphia North American.

GEORGE W. CHILDS,
Editor Philadelphia Ledger.

HON. ERNEST DICHMAN,
United States Minister to Colombia.

MIGUEL SALGAR,
Consul of Colombia.

C. A. DANA.

E. M. ARCHIBALD,
Consul-General of Great Britain.

THOMAS A. EDISON.

Gov. GEORGE B. McCLELLAN.

Lieut. L. N. B. WYSE.

HON. J. DIRKS.

Gen. W. W. WRIGHT.

M. BUTAN.

M. BIONNE.

M. DAUZATS.

M. DAUPRAT.

M. GALLAY.

M. CONVREAU.

J. W. SIMONTON.

NATHAN APPLETON.

ADDRESSES.

OPENING ADDRESS BY REV. DR. STORRS.

THE Rev. Dr. Richard S. Storrs, the chairman of the meeting, was greeted with hearty applause as he arose to open the intellectual repast, which was no less notable than the repast of the senses which had preceded it. He began his remarks with a reference to the presence of Mme. de Lesseps and some other ladies, who had just come into the dining-hall, saying: "Gentlemen:—and since our eyes have rejoiced to see these more ethereal figures that have come to grace our assembly—I venture to say, Ladies and Gentlemen:

We have gladly assembled this evening to offer our hearty and admiring welcome, the welcome of all American citizens whom we may be held in any sense to represent, to the very distinguished man who has done us the honor to become our guest. With his patriotic sensibility, it can not but be gratifying to him to feel that this welcome has in it only more of the sentiments of honor and of pleasure because we greet him as one of the most distinguished living representatives of a great and gallant Nation, to which we are bound by many ties [applause]; which was the earliest and the constant friend of our Republic a hundred years ago, in our own strenuous struggle for national existence; the splendor and the tragedy of whose subsequent career have filled Christendom with its renown; which is the only great power in Europe that holds the faith and main-

tains the form of that republican government which to us is venerable and dear. [Applause.]

A hundred years ago, last January, Washington wrote from Morristown to a distinguished officer of the American army, then contemplating an important military movement, that the state of the army was such as to fill him with the most anxious and alarming fears. Half starved, imperfectly clothed, and riotous in spirit, it was impossible, in his judgment, to enter upon any military enterprise with troops in such a condition. A few weeks later than that, the Marquis de Lafayette, then in Paris, on the eve of his second departure for America, wrote to Benjamin Franklin, then representing our Colonies in France: "From the Minister of War, and the Minister of Foreign Affairs, I get the most positive assurances that our 15,000 stand of arms, with the same number of accoutrements, will be soon delivered for the use of the American army, and safely conveyed. —I have made it a point to carry with me about 4,000 complete suits [of clothes for the army].—In consequence of positive ministerial assurances, I make no doubt that you will have the safest convoy for the remaining 6,000 suits, which are to be made at Nantes." That letter was written a hundred years ago yesterday; on the 29th of February, 1780. It has been a long time in coming to us; but it comes in good time, if to our guest it adds another sparkle to the welcome of this evening, by assuring him that we cherish the souvenirs of the past, and that we are bound by affectionate ties to that gallant and grand Nation which was our early friend. [Applause.]

But whatever his nationality, Austrian, Russian, Italian, Spanish, Swiss, or Swede, we should welcome him, for the personal qualities which we and all others recognize in him: for the fine and masterful intelligence which the world has learned to appreciate; for the heroic humanity with which his name was identified in Spain, almost forty years ago; for the liberal sentiment, and the liberal feeling and principle, which he manifested when the representative of his country at the Court of Rome; for the unsullied—we may almost say the fastidious—integrity, with which he has been content with an honorable competence, while he has been putting millions upon millions into the hands of other men; for the great work which he has accomplished for

civilization, in opening the Isthmus of Suez, bringing the East and the West nearer together, and seeming actually to shorten the daily path of the sun in the heavens. [Applause.]

On the house of Galvani, at Bologna, stands a tablet with a record which may be roughly translated: "I received Galvani at his birth; I mourned him at his death; by whose discovery the poles are joined." We trust it will be long before any tablet will be needed to record the achievements and to celebrate the character of our illustrious guest; but, whenever it is placed, it will fitly recite the fact that against all natural obstacles, against the sluggish timidity of capital, against the hostile opinions, and so-called demonstrations, of eminent engineers, against the reluctance and the resistance of peoples and of Governments, after a steadfast and victorious struggle of fifteen years, he compelled the Red Sea and the Mediterranean to mingle their waters in the midst of the desert, and brought London and Bombay to salute each other across the Bitter Lakes of Suez. [Applause.]

But, of course, gentlemen, we understand that our guest is not content with any past achievement, and has not come to this country upon a tour of pleasant general observation, but with reference to the greatest physical work yet remaining to be accomplished upon the planet, perhaps, for the final liberation of the commerce of the globe; a work worthy of his powers and his aspiration; which, being accomplished, is to make not only his name illustrious, but the century memorable in the annals of the world.

Of course, there are many questions connected with the subject thus opened to us by his coming, into which it is not needful, or proper perhaps, that we should enter: questions of engineering, for example. I remember to have heard it said once upon high legal authority—what was excellent fun I thought—whether it was equally good law or not others will determine—that inasmuch as streams are often called "laughing brooks," there would seem to be no legal tort involved in providing diversion for any water-course. [Applause and laughter.] Whether any amount of diversion will convert the roaring and turbulent Chagres River into a laughing brook is for M. De Lesseps and the experts associated with him to say. There are monetary and commercial questions suggested: as to whether capital suf-

ficient can be raised, or whether the canal will prove to such capital a remunerative investment. Our honored guest is confident on both these points; and, remembering his past successes, he would be a bolder man than I am who should venture to question the correctness of his judgment. But it is a question upon which we need not enter; unless there happens to be some gentleman present with a hundred and twenty millions about him, in regard to which he would like our judgment as to their investment. [Laughter.]

There are grave political and diplomatic questions involved. In 1823, as we know, it was understood that the Allied Powers in Europe were threatening the reëstablishment of monarchical institutions on this side of the ocean, in Chili and Peru, in Mexico and California. At that time, therefore, President Monroe, in his Message of December, incorporated a declaration, which is said to have been suggested by Mr. Canning, and to have been written by Mr. John Quincy Adams, to the effect that the United States would regard any attempt, on the part of those Allied Powers, to extend their system to any part of this hemisphere as dangerous to our peace and safety, and as indicating an unfriendly disposition on their part toward us. I am not aware that that has ever been formulated into law, by any act of Congress. But I suppose that it expressed at that time, and expresses still, in its supreme political significance, the steadfast and unswerving judgment and will of the American people. Whether that memorable declaration is in any necessary conflict with a commercial enterprise, undertaken and conducted by private persons, without any political aspirations, with no governmental complications—an enterprise initiated and advanced in the great republic of Europe, and hailed with enthusiastic welcome by the great republics of Central and Southern America—an enterprise, half of whose capital stock is offered at the outset to Americans, and the whole or the major part of which may be owned on this side of the Atlantic, next year, or in any future year—is a question about which there may possibly be differences of opinion, but into which it is not necessary for us to enter. As to the diplomatic measures which may be needful to secure to American citizens the equal and free right to the navigation of the canal, if it should be completed, to

secure to it such a neutrality as already belongs to the Suez Canal—in which I have seen it stated that the hostile war-ships of belligerent powers have been seen lying side by side, as harmless to each other as two old canal-boats in the Erie Basin—as to what measures may be needed to secure that, we may refer it to the Government; and we of New York should know the wisdom, patriotism, and diplomatic skill of our distinguished Secretary of State sufficiently well to be content to leave such questions, touching our interests, however vital they may appear to be, in his skillful and experienced hands.

But, postponing such questions, we can not but think of this enterprise, as now proposed and contemplated, in its relation to an inspiring past, and to an illustrious future. It has the push of fifty years of incessant and grand advance behind it. During that time, as we know, the enterprise and skill, the private and the public enterprise, of Europe and of America, have been converging all the time upon the end of making intercommunication, to which reference was made in the prayer, more sure and rapid; between different districts of the same country, between different countries of the same continent, between different continents of the same hemisphere, and between the hemispheres. The railway system—it has dissolved the Apennines, and made Italian unity possible: the dream of six hundred years realized in a day! It has bound together the Austrian, it has bound together the German Empire. It links Havre, Calais, and Paris, with Nice and Marseilles, the mouth of the Loire with the mouths of the Rhone. It overlays England so thickly that you can hardly insert a pin-point between the lines which represent it on the map. In our own country, it makes neighbors of Maine and Texas, of the Hudson and the Rio Grande; it overleaps the alkali plains, levels the mountains, and brings the Bay of New York and the Golden Gate within a week of each other. At the same time steamships on the sea—great shuttles flying back and forth—have been making the hemispheres neighbors, weaving the web of international and intercontinental relations, robbing voyages of half their danger and half their discomfort. And the telegraphic system enables the merchant or the banker, in his counting-room here, to transmit his thought and will almost instantaneously around the world.

Civilization has been doing, in other words, precisely what the Roman empire did when it flung out its great avenues to Gaul, to Spain, to the Lower Danube, to the Straits of the Hellespont, to the Cataracts of the Nile; only that modern civilization has been doing this, not for imperial aggrandizement, but for the multiplication of centers of wealth, population, and power, for bringing nations to know each other better, for the advancement of liberty and peace, and of the Christian faith. [Applause.]

It is only in the line, then, gentlemen, you observe, of this immense and brilliant advance, that wherever a natural barrier interposes itself to the progress of commerce, enterprise and skill strike it, to pierce it, to surpass it, to abolish it. The Suez Canal, to which reference has been made, is the most signal illustration of this endeavor successfully completed. The waterway planned by our guest across the Isthmus of Corinth is another smaller link in the same chain of progress; and the Asian railway—to bring India and Europe nearer—is still another. Italy and France, not content with flinging lines of railway over the Alps—like the Brenner and the Semmering—struck the Mont Cenis, to cut through it that prodigious channel of eight miles and more, through which, no doubt, many of us have swiftly ridden, through which the trains of travel and of traffic slide all the time, in strangest contrast with the fierce, swirling zigzags by which men of old climbed the mountain on one side and descended on the other. And the tunnel of the St. Gothard, the tidings of the completion of which have come to us only this day, with its longer channel through harder rock, has brought the lake of the Four Cantons and the Italian lakes, Maggiore and Como, within a few hours' easy ride of each other. [Applause.]

You, remember, perhaps, the story that is told of our eminent and favorite American philosopher—Mr. Emerson. I don't know that it is true, but it has certainly an air of verisimilitude: that he was once accosted on the street by an ardent disciple of the Second Advent theory, who broke upon him with the astounding information that the world was to be destroyed in a couple of months. "Well, what matter?" said the meditative man; "to the philosophic mind, you know the planet has always

been of the nature of an obstruction. We shall get on perfectly well without it." [Laughter.] To the commercial mind such obstructions are fast disappearing; and, while we could not get on well without the planet, perhaps, it is likely to become, for all purposes of commerce, very nearly a smooth surface.

Our distinguished guest comes here, as I have said, with reference to the last and grandest work of this kind remaining to be accomplished—the piercing of the isthmus of rock which divides the oceans, and unites the continents, twenty-five hundred miles to the south of us. Of course, it is not a new conception. He has himself referred, I observe, to the plan which Philip II. once adopted, and afterward abjured, looking toward the piercing of that vast barrier. I believe it is an authenticated fact that Charles V. still earlier contemplated the same thing; and there is yet another fact, which I have never seen referred to, which perhaps indicates that at an earlier time even than that the same thought had entered the minds of men. If there is any European geographer whom America ought to hold in honor it is Johannes Schoener, of Nuremburg, who first publicly applied the name America to this continent, in a book published by him—which I had the pleasure of reading a few days since—in the year 1515. Johannes Schoener, in the year 1520, the year in which Magellan discovered the straits which bear his name, but before any tidings of that discovery could have arrived in Europe, constructed a globe, which one still sees in the City Library of Nuremburg, upon which the Isthmus of Panama is plainly marked, with a line carefully and sharply drawn across it, as if to represent Schoener's belief that there either was a strait there, or, if there was not, that there certainly ought to be, and that man might be trusted at last to cut it. Three hundred and sixty years ago the prophecy on that globe was traced!

Our Government, as you know, has made several careful and costly explorations, tending at last toward the preference, on the part of the American people and officers, for the Nicaraguan route—through the San Juan river, and the lake. M. de Lesseps believes that a canal can be cut, a tide-level canal, without locks, thirty feet in depth, at a reasonable cost, within a reasonable time, through the forty-six miles which divide Aspinwall from Panama; that it can be done with even less

difficulty than was involved in the construction of the Suez Canal; and he throws himself, with French enthusiasm, and with French and Dutch science, against that rocky barrier, determined to conquer it. [Applause.] At the age of seventy-four, when most men are retiring from active affairs, he undertakes to lower those rocky ridges, and through the cloven chasm of the hills to open a channel, along whose level and liquid way the products of the earth, in fruitful interchange, shall slide undisturbed back and forth. [Applause.]

Gentlemen, I bow in admiration before the genius which thus determines to make a reality of the dreams of centuries. [Applause.] I think of the immense relations of that work to the civilization of our western coasts, of the western coast of America, from the northernmost point of Alaska to the southernmost point of Chili. I think of its relation to the civilization of the great Eastern Empires, which we shall soon have to call the Western Empires, of China and Japan. [Applause.] I think of its relation to the commerce of the world, whose ships will be seen, when this is finished, flocking over every sea toward that narrow line, "as doves flock to their windows." I think that there is no interest on earth—in a civilized country—of industry, of invention, of commerce, of liberty, of philanthropy, of missionary effort, which is not to be facilitated by that work accomplished. I see in it the fulfillment of the dream of Columbus himself, who sailed from Spain that he might find a straight path over the ocean to the Indies; and then, I say, conscious of all the responsibility of the statement, that there has been, to my mind, no grander enterprise undertaken for the commerce and the civilization of the world, since that summer day when the visionary enthusiast of Genoa set sail from Palos!

The American people are fond of great conceptions. It is born in their blood; it is nourished by their history; it is stimulated by the configuration of the country and its vast expanses, and by the vital and quickening air which we inhale. The American people, in my judgment, will greet with enthusiasm this great conception—determined that their interests, which are many and are vital, shall be carefully consulted and conserved in the accomplishment of the enterprise, but rejoicing that it is apparently now cresting toward its success, and ready

with a unanimous and hearty welcome, of which ours is only the foretaste and the prophecy, for this man who sits so quietly by my side—with no retinue, no army, no navy, behind him, but with all the pressure of modern civilization for his helper, and with that quiet hand laid now on the levers of history. [Applause.]

The United States.

ADDRESS OF HON. JOHN BIGELOW.

MR. CHAIRMAN: The sentiment with which you have been pleased to associate my name in such flattering terms is one upon which only an official representative of the United States can speak with authority. I suppose it is unnecessary for me, in this presence, to disclaim any authority to speak for the Government at Washington. However, freedom from responsibility often confers freedom of speech. In fact, one of the purposes of this festival, I suppose, is to have a little free speech about the monumental enterprise which has been projected by our distinguished guest to marry the waters of the Pacific and of the Atlantic oceans.

I infer, from my own experience, that one of the first impressions which a child receives from a study of the chart of the Western hemisphere is one of wonder and disappointment that the oceans do not communicate at the narrow isthmus which separates North from South America. I doubt if any person, young or old, ever became familiar with that chart without having some such thought pass through his mind. So was it one of the earliest problems of the transatlantic navigator. Long before the lineaments of our continent were traced by the geographer, Charles V. had instructed one of his explorers to search for the secret of the straits—*el secreto de los estrechos*. Since the commencement of this century we are told, by an apparently well-informed writer in "Lippincott's Magazine,"

that there has been an average of at least two surveys of the Isthmus region a year, to find some practicable way of breaking the barrier which separates the waters of the two oceans that wash the shores of America. The literature of this subject alone already makes a library of formidable proportions.

Why has this barrier been left as if the work of Providence in this hemisphere were unfinished?

Far be it from me irreverently to presume to interpret the ways of God to men, but I hope there is no presumption in saying that it may have been better for the world that this gate to the Eastern seas should not be opened until we were able to open it; until the advance of science, the accumulations of wealth, the diffusion of intelligence and sound principles of statesmanship among the European states and their offspring, had prepared them to profit by a more frequent and familiar intercourse with the elder civilizations of Asia. The height of the mountain passes of the Isthmus and the pestilential breath of its swamps, are they not the Providential measures of the forces that should be at the disposal of our Western civilization before it will be properly equipped for a conflict or closer contact with the pagan civilizations of the East? Are we yet prepared to cope with such an antagonist? Have we the science, have we the wealth, have we the faith necessary for such a struggle? Whether we have or not I have no pretension to give an opinion, but we are so fortunate as to have with us to-night a gentleman who has a way of doing impossible things, and he says we have; that the world is now fully prepared and competent to canalize the Isthmus, and to cope with all the consequences that could result from such an enlargement of the commercial facilities of the world.

It has been suggested that we should be careful how we countenance the project of M. de Lesseps, lest in doing so we surrender a favorite political tradition, which is commonly spoken of as the Monroe doctrine.

The popular view of the Monroe doctrine, and that is the only one we need take any notice of to-night, is that the sisterhood of American states will make common cause against any non-American states to deprive any one of them of its autonomy or to impair its sovereignty. That, I believe, is what our

people mean when they talk of the Monroe doctrine. I believe, further, that this is no more the doctrine of the people of the United States than it is the doctrine of the people of Peru, of Chili, of Nicaragua, or of Colombia, though they may give it a different name.

This doctrine no one, I am sure, in this assembly—our distinguished guest least of all—would think for one moment of subordinating to any scheme for the mere promotion of commerce, however imposing or lucrative its character.

The inauspicious attempt to deprive our sister republic of Mexico of her autonomy in the interest of an Austrian prince and the consequences of that attempt are quite too recent and conspicuous events to allow any doubt to exist on that point in any quarter of the globe.

But what has this doctrine to do with the construction of a new and incalculably valuable artery of commerce through the territory of our sister state of Colombia, and with her entire and cordial assent? Would not the obstruction of such a work by any foreign power be interfering with the sovereignty and independence of Colombia? Would it not be in itself a violation of the Monroe doctrine of the most unequivocal character? Might we not as well attempt to apply the Monroe doctrine to the newspapers and books of Europe, and prohibit their crossing the Atlantic, lest they unsettle our republicanism?

God forbid that a rule of comity which leads us to fly to the aid of our sister states who may be threatened by foreign fleets and armies should bind us to turn our back upon any effort to improve our relations with each other or with the rest of the world; should bind us to resist an attempt to multiply social, commercial, and industrial guarantees against a policy of aggression and conquest!

What could we desire better than that a portion of the money which our European friends are now spending in cutting each other's throats should be diverted to a work which would contribute more useful produce to the markets of the world than any other conceivable public enterprise?

But, Mr. Chairman, it may be said that the English and Dutch and French and Spanish and Portuguese capitalists are not going to give their money to build this canal without some

guarantees from their respective governments that it will be maintained as a public highway, and that any participation in such a work by foreign governments would be the entering wedge to a system of European meddling on this continent.

Now, Mr. Chairman, I do not know what aid M. de Lesseps expects from European governments or people, if any, in the construction of this canal. I only hope they will build it all. I think that would suit us exactly. Nor do I know that I care much what guarantees they take from each other or from the Colombian government with its free assent, provided they secure the uses of the canal to all nations upon precisely equal terms.

When the work is done, what is it? It is not a fortress; it is only a canal. It renders no belligerents—unless it be the American states, whom it brings into closer relations—a particle stronger, nor any belligerent weaker—unless it be the European states who derive no corresponding military advantage. Should any foreign state endeavor to exert undue influence upon the state of Colombia, in what respect would the canal render the United States less competent to resist that influence? If at any moment the property were used, or threatened to be used, to the prejudice of the United States, what would its stock be worth if our government were to frown upon it? Why, gentlemen, the fate of Maximilian's scheme to plant a foreign government in Mexico a few years ago ought to put an end to all fears on this subject. The United States made no war upon Maximilian's government nor upon his allies. It did not even threaten them. It simply refused to recognize the new government, and continued to recognize the supplanted government as the lawful government of the country. That did not compromise our friendly relations either with France or with Austria. It did not cost us a cent of money or an ounce of powder, and yet it sufficed to make Mexico uninhabitable to her invaders.

The fact is, Mr. Chairman, if the construction of a new artery for our commerce on this continent with the aid of foreign capital is a violation of the Monroe doctrine, then we are violating it every day in permitting our railway bonds to be sold abroad and foreign steamers to load and unload at our wharves.

France and our Sister Republics in America.


Joined to our country in traditional friendship, and in common guardianship of free institutions, peace and national justice—with open heart New York greets them all.

REMARKS OF SEÑOR AROSEMENA.

THIS toast was responded to successively by Señores Arosemena, Minister of the Colombian Republic to the United States, and Zamacona, Minister from the Republic of Mexico. Señor Arosemena said the conditions under which America and France and the sister republics of America were joined in national sympathy and political as well as commercial interests to-day were vastly different from those of one hundred years ago. France was no longer in the power of the Bourbons or the Napoleons, but was a republic like ours. It was from France and her revolutions that the states of South America learned the rights of men to be free and to strike for liberty; it was from France that they learned their first lessons in politics, and afterward, when the American Revolution succeeded, another and greater example was given to people who wished to be free, and then came the series of great changes which the world has since witnessed from despotism to liberal government; and these two great examples—America and France—all the South American republics seemed disposed to follow. As for their political institutions, he would not say much here—the term of a president in Colombia was two years, and they could reëlect him as often as they pleased. (Laughter.) In fact, it might be very wrong here to state all the liberal principles which they had put into practice. He would close, however, by saying he hoped to see the success of this newest enterprise—the transisthmian canal.

REMARKS OF SEÑOR ZAMACONA.

SEÑOR ZAMACONA expressed his thanks for the honor of speaking to so distinguished an assemblage, and said that nothing but such an honor would lead him to respond, laboring as he was under a complaint which seriously affected his nervous system and his brain. There could be so many differences of opinion, and so many antagonisms of interests in this question, that it presented both local and national considerations on every side. Mexico, of course, would have desired, more as a point of honor than as a point of national or private interest, to open her own gates to the traffic of the world across the American continent, but the local, national, or selfish interest, as it might be called, had not placed Mexico above the general and most important interest of civilization and the universal interest of commerce and trade. (Applause.) So, if no other project, no other way of communication was more practicable, let it be executed as now designed, and Mexico would contribute her small share of energy, influence, and power to overcome the obstacles of such an enterprise. (Applause.) When such a great object was undertaken by such great nations as France and the United States, it would be executed beyond a doubt, and would contribute to strengthen the brotherly ties of the whole fraternity of republican states. (Applause.)



Our Honored, our Welcome Guest.

SPEECH OF M. FERDINAND DE LESSEPS.

J'AFFAIBLIRAI la force des eloquentes paroles prononcées avec tant de bienveillance pour moi par votre président, si j'ajoutais rien à son admirable discours. Il a parlé en vrai Américain, et il a traité mon projet à un point de vue véritablement Américain. Je ne veux pas entrer dans une discussion, comme Fran-

çais, sur les questions qu'il a touchées avec tant de grâce et tant de force à la fois. Je n'ai qu'un mot à répondre. Dans nos négociations relativement à l'ouverture du Canal de Panama, pour lequel j'ai la concession du Gouvernement de Colombie, j'ai déclaré formellement que je n'avais aucun intérêt politique dans cette affaire, et que je ne recherchais aucun avantage particulier pour mon pays. Je renouvelle aujourd'hui franchement cette déclaration, et je dirai au Président des Etats-Unis, quand je le verrai samedi prochain à Washington, que si jamais la politique venait à s'en mêler, je serai très heureux de recourir à la protection des Etats-Unis.

Les Etats-Unis ont droit à la prééminence dans cette affaire, et j'ai la conviction qu'ils l'auront. La science a déclaré que le canal est possible, et je suis le serviteur de la science. Je mènerai cette œuvre à bonne fin, et elle fera l'Amérique reine des mers.

Je présente mes remerciements à cette assemblée pour sa très gracieuse réception, et dans les souvenirs agréables que j'emporterai de ma visite à cette grande république, elle occupera l'une des premières places. Je vais prochainement quitter cette ville, et je visiterai tour à tour Washington, Philadelphia, San Francisco, Chicago, et Boston, pour exposer devant votre peuple les mérites de mon projet. Je dirai franchement dans ces villes ce que j'ai dit ici, et si j'y suis reçu aussi courtoisement que je l'ai été ici, je considérerai le succès de mon entreprise comme assuré. C'est aux meilleurs intérêts de l'Amérique et à sa prospérité future que cette entreprise tend principalement, et elle doit, comme j'espère qu'elle le fera, contribuer aux dépenses nécessaires dans la mesure des immenses avantages qui ne peuvent manquer d'en dériver pour elle. Messieurs, je vous remercie.


[TRANSLATION.]

I should only weaken the force of the eloquent words spoken with much kindness toward me by your president, if I added anything to his admirable address. He has spoken as a true American, and has treated my enterprise from a truly American standpoint. I do not, as a Frenchman, wish to enter

into a discussion on the questions which he has so gracefully and at the same time so forcibly presented. I have only a word to say in reply. In our negotiations relating to the opening of the Panama Canal, for which I have the concession from the Government of Colombia, I formally announced that I had no political interest in the affair, and that I sought no especial advantage for my own country. I repeat frankly to-day this declaration, and I will tell the President of the United States, when I see him next Saturday at Washington, that, if ever politics should be mixed up in the question, I shall be very happy to have recourse to the protection of the United States.

The United States have, by right, the preëminence in this enterprise, and it is my conviction they will secure it. Science has declared that the canal is possible, and I am the servant of science. I will carry this work to a successful result, and it will make America queen of the seas.

I wish to thank this gathering for its very gracious reception of me, and, among the agreeable souvenirs I shall take with me of my visit to your great republic, it will hold one of the first places. I am going soon to leave this city, and I shall in turn visit Washington, Philadelphia, San Francisco, Chicago, and Boston, to present to your people the advantages of my plan. I shall frankly say in those cities what I have said here, and, should I be received in them as courteously as I have been here, I shall consider the success of my enterprise assured. It is to the best interests of America and to her future prosperity that this undertaking principally tends, and she ought, as I hope she will, contribute to the necessary expenses in proportion to the immense advantages which she will derive from it. Gentlemen, I thank you.



The City of New York.

The metropolis of the New World, a close ally with all apostles of progress.

MAYOR COOPER'S REMARKS.

A CITY that does not extend a hospitable welcome to great men and great ideas can not itself be accounted as great, and if it be really entitled to this distinction, the truth is the highest compliment which can be offered to it. St. Paul, when he told the Athenians from Mars Hill that they were "superstitious," and our illustrious guest, when, the other day, he characterized our engineering achievements as "audacious," both felt the force of this idea and gave it a spontaneous expression. We thank M. de Lesseps that he has come hither to explain his great plans, because it implies that he believes New York to be great enough to appreciate his comprehensive ideas for the development of universal commerce. It would be strange, indeed, if, under any circumstances, New York did not extend the full measure of its hospitality to M. de Lesseps, who, of all living men, is the embodiment of the ideas which has given to this city its primacy among the cities of America. The system of State canals, executed by the genius, energy, and indomitable will of the most illustrious of my predecessors in office, De Witt Clinton, has made New York the center of the enterprise, capital, and civilization of the Western World. From the day when the Erie Canal was finished New York ceased to be provincial and became cosmopolitan. Of this the proof is furnished to-night, when the home of Clinton receives the world-renowned constructor of the Suez Canal as altogether worthy to be ranked with the great benefactor of the Empire State, by whose genius we have been made so strong that, unlike the doubting Trojan, we fear not even those who bring us gifts. But New York is as loyal as she is liberal. While she accepts great ideas with the same alacrity that she welcomes great men, she is true, as

she ever has been, to the traditions of the fathers and to the policy which has made our republic as great as it is free. To that policy, when deliberately expressed by the voice of the nation, New York will yield a loyal assent, and it will be sustained, at whatever cost to her commercial interest, by all her citizens, in whose behalf I have the honor to speak and to assure our distinguished guest of the high esteem in which they hold him and his undertakings. That there may never be any antagonism between them and our national policy is, I am sure, not only the earnest desire of M. de Lesseps, but of every person who joins in this tribute of respect and admiration to one who has accomplished undertakings so beneficial as to entitle him to the gratitude of mankind.

Commerce.

The handmaid of benevolent civilization.

ADDRESS OF MR. A. A. LOW.

MR. PRESIDENT AND GENTLEMEN : The toast to which I am invited to respond opens a field for contemplation as large as the world, as limitless as time, as comprehensive as all the ages during which man has moved on the face of the earth, of which we have record or tradition.

A proper consideration of so grand a theme would necessitate an inquiry into the varying conditions which have attended the progress of the human race, from the earliest creation until now ; an inquiry into the varieties of climate and diversities of production which distinguish different parts of the globe ; and an inquiry as to what extent an interchange of the necessities and of the useful things of life has contributed to the welfare and happiness of mankind.

In tracing the growth of communities from a beginning,

however small, through the expanding proportions of village, town, city, and commonwealth, until at length it culminates in a great, powerful, and cohesive nationality, we discover, between man and man, a law of mutual dependence, resulting from endowments and capacities, as various as the different climates and conditions under which they are born.

By nature men are formed to be thus dependent on each other, and for reasons as strongly marked as those which affect the relations between city and country, and appertain as well to the differing properties and products of the separate zones. In feudal times men gathered themselves into "communities," for the sake of mutual protection; in more peaceful times, for the convenient pursuit of their various avocations.

It is through the agency of commerce that this law of mutual dependence of men and communities upon each other is mainly enforced and fulfilled.

The law of supply and demand of which we are accustomed to speak is the resulting issue of what is inherent in our constitution, and becomes manifest in appetites, desires, and tastes, which are multiplied and enlarged with every added opportunity for their gratification, all attaining their highest development in the most advanced state of civilization.

It would be impossible within the limit of a brief address to discuss the comparative weight of the different forces which have been at work during all the centuries, and acting together for the improvement and elevation of the human race. But, in every important movement affecting the interests of man, commerce has filled a most important part. This is as clearly written on every page of ancient and modern history as it is patent to the senses of all whose privilege it is to live in our own highly favored age.

At one time commerce has been the ally of the adventurous navigator, as it has been the motive power which has sent him abroad upon strange seas, in quest of lands before unknown. At another period it has opened the doors of empire to the arms of the conqueror, after exercising a sway only less than regal over peoples that have been numbered by hundreds of millions. Again, it has cleared the way for the messenger of life and of light to the heathen, not infrequently providing the only means

by which the missionary could obtain passage to the remotest parts of the world.

While its own methods are naturally tranquilizing and peaceful, commerce has lent strength to the arm of the soldier and imparted vigor to war—war sometimes waged for noble ends, and, alas! too often in a bad cause. Like religion, commerce has been made the companion of vice in many wrongs perpetrated by the hands of power against the semi-civilized and the weak; as notably in Mexico and Peru as in any other portion of the world. Nor, in our own day and in our own land, so largely blessed with the knowledge of Christian truth, has it been obedient to the curb too feebly held by Christian hands.

Commerce, intended by God to diffuse and exchange the fruits of the earth and the products of human skill among the different peoples of the globe, has at times not only been aggressive in spirit, but practically hostile to the promulgation of religious truth—neutralizing the labors of the missionary by humiliating contrasts, weakening the Christian precept by opposing to it a bad example. Nor have nationalities been less to blame than the merchant in pursuit of gain, when imparting imperial sanction to a traffic in a deleterious drug, the use of which tends not to preserve but actually to destroy human life—thus perverting a beneficent institution to evil ends.

But I would not dwell upon abuses naturally resulting from a law of imperfection that is incident to human nature. It is far pleasanter to contemplate the good and the evil, which, to some extent, are inseparable; to call to mind how many institutions which are a blessing to man owe their origin to the public spirit of the opulent—to those who have been enriched in the paths of trade and commerce; what schools and colleges have been founded; what libraries, public and private, established; what galleries of art; what bountiful provision has been made for the dispensation of charity in manifold ways; what costly edifices raised for the worship of God.

Every land and every sea has been made tributary to one great end—the promotion of man's comfort and enjoyment of life on the earth.

The wealth of human thought, the gifts of rare genius, and

the results of human skill have been transported from country to country, translated into every language, and made the property of every land—descending from generation to generation to swell the common inheritance.

Who shall say that commerce is not a tranquilizing agent, when it stills the voice of complaint in its ministry to the starving population of Ireland and to the far-off people of India and China, so lately stricken with famine; when it sends its ships across the sea, laden with the riches of our favored soil, to relieve the wants of the hungry and perishing? All praise to those who have been most forward in promoting enterprises so worthy of a philanthropic and Christian people!

In thus touching upon certain phases of my theme I have failed to show by what slow degrees, in earlier times, and by what accelerated steps, in these later days, commerce has pushed forward the advancing columns of civilization in its progress from land to land, from continent to continent; how, emerging from a state of barbarism, man has at length found his way into the open day of almost universal light. The caravans of the desert, by means of which the gums and spices, the ivory and precious stones of Asia and Africa, were brought to the doors of Europe, have given place to the ships of the sea, and these, in turn, have been supplanted by steamers of a magnitude and power that are the admiration of an age which science and art have crowned with their grandest achievements.

We meet here to-night to do honor to the man who conceived and executed the design of uniting the waters of the Mediterranean and of the Red Sea, and in whose presence this evening we repeat the bans of a projected union between the Atlantic and Pacific Oceans.

Politicians, and even statesmen, may proclaim other doctrines, but an educated and enlightened people will ever welcome to the shores of the American continent the genius, the skill, and the treasure which will serve to widen and extend the sphere of commerce, and make it all-embracing.

Candor obliges me to add, that the natural difficulties to be overcome in the prosecution of the proposed work are very formidable, and to the mind of a layman they seem to be insurmountable without governmental aid; and I do not understand

how any canal, wherever located, could, in the event of war, remain under American control as against the European navies of modern times.

The Press.

First to hear and proclaim the demands of the age.

ADDRESS OF DAVID M. STONE,

EDITOR-IN-CHIEF OF "THE NEW YORK JOURNAL OF COMMERCE."

MR. PRESIDENT, LADIES, AND GENTLEMEN: I shall interrupt this flow of eloquence but a few brief minutes while I thank you in behalf of the press for your kind recognition. It is fitting, perhaps, that I should be called on to speak to this sentiment, for I am almost the sole remaining link between the great founders of the metropolitan press and their younger but not less gifted successors. [Applause.] Hallock, Raymond, Bennett, Greeley, Brooks, and Bryant have gone on before me, leaving me as the patriarch of the press to speak for two generations. [Applause.] But the press is represented here besides myself in noble men from other cities. McMichael and others are present, and near me sits Mr. Childs, whose name is a household word in all the homes of America. [Great applause.] The proclamations of the press are usually addressed to the eye rather than to the ear, and it might be wise for us to listen to-night and speak early to-morrow morning from the printed page. I am thankful that not always those who hear the quickest have the longest ears [laughter], or else from the words of your toast it might be inferred that the conductors of the public press have those enormous appendages which are not always associated with the highest sagacity. [Laughter.]

The open ear, the open heart, the open hand—these mark all that is noblest in human experience. The press, so far as it

is true to its high mission, is the first to hear any and every appeal which each succeeding age makes to its servitors. Not alone as historians after the conflict is over, but as trumpeters guiding the advance, or pioneers, if you will, in the thickest of the onset, the press has always been foremost in all that quickens human progress or tends to the higher culture of the race. [Applause.] Whether it is a nation of bondmen struggling for freedom or a hungry people crying out for bread, the leaders of the press have been the first to hear and respond to the call. [Applause.] In science, in art, in commerce, their voice has always been heard from the front calling on the people to come up to their ever-increasing privileges.

Four thousand years ago a narrow cut was made from the Red Sea to the Mediterranean. It was but an outlet for the fresh water of those midland lakes, and was never used except for purposes of irrigation. Twenty-five hundred years ago Pharaoh-Necho conceived and partly executed the project of a canal; but there was no press in those days [laughter], and the cut was lost in the sands of the desert. In our age the attempt was renewed: the press took up the call and echoed it on every side, and the hour found a man of extraordinary sagacity, of indomitable vigor, of tireless energy, to respond to that call. [Applause.] Thus Suez was opened, and a new highway for commerce to the East. Columbus made a new path across the trackless waste to a new world, but De Lesseps opened a new path, where the mighty Pharaoh had failed, to the earliest and oldest home of the race. [Applause.]

In our day two oceans that touch each other only at the far extremity of the southern continent are sighing for a closer union. Not satisfied with the iron bands with which we have sought to wed them across our Western fields, they are struggling to divide the narrow boundary which separates them from each other at the Isthmus, and to mingle their waters as one main, to serve the commerce they bear upon their billows. [Applause.] It matters not whether this cut is made at Panama, at Nicaragua, Tehuantepec, or by way of the Atrato, so that it is well done when it is done, and there is no obstacle to the flow of the waters together. [Applause.] Some have been afraid of any foreign interference in this work. I am not afraid

of any foreign coöperation in the interest of commerce. Free trade is a glorious fellowship the world over! [Great applause.] The cluster of republics at or near the Isthmus, representatives of which I am happy to see for the first time at a public dinner in New York—with which, too, we are coming into closer relations with each succeeding year [applause]—have sent out their call inviting the world to the task. Let our great sister republic across the ocean, bound to us in the most tender and loving ties by a thousand hallowed associations, send over here her great promoters of commerce, her lavish outflow of treasure, and all the mighty forces required for such a noble work. We bid them welcome and godspeed. [Applause.] If the governments of Europe attempt to follow these messengers of peace with the tax-gatherer, the tribute-seeker, the chiefs who levy mail and cripple commerce and overturn established institutions, why, then it will be time to take down from its hook, where it has idly hung so long, the old Monroe trumpet. [Great applause.] If that moment ever comes, and the danger is real, you shall find the press first to dut the trumpet to its lips and give the note of warning. But it is a waste of energy to sound the charge when there is no foe in the field. [Applause.] At present I see only commerce spreading her white wings peacefully over all the seas. [Great applause.]

Engineering.

The intermediate power between nature and civilization.

REMARKS OF MR. A. L. HOLLEY.

MR. CHAIRMAN: The sentiment you propose so completely defines the master art of engineering that it needs no historian, no prophet, no defender. It were better, to-night, that we magnify its splendid achievements, as we celebrate the advent of its illustrious apostle. It is such grand conceptions as his, such triumphs over difficulty, such faithful and brilliant execution,

that draw the members of our profession to him ; but our profession it is that draws the whole world in its triumphal march. The ways and means of transportation, of mining, metallurgy, manufactures, defense, agriculture, architecture—all the round of vital and useful arts—are but phases of engineering effort.

But engineers are not proud ; they simply can not help it that they are the way, the vehicle, the power of civilization. They even acknowledge the incidental value of other professions. Chemistry is a noble art—full of promise—but only complementary to engineering. Engineers are, for this reason, sometimes complimentary to chemists. Commerce, banking, jurisprudence, political economy, government, are more or less useful systems—for what ? For formulating and realizing the potentiality of engineering. And so the noble art—stimulating labor, promoting comfort, founding prosperity, diffusing happiness, establishing knowledge—blends, in its own potency, the aims of the three learned professions of old, and itself leads on to universal health, equity, and virtue.

I do not wish to be understood, sir, as claiming *much* for engineering ; so sensitive is the modesty of my colleagues that they would not tolerate an overstatement of its claims.

Viewed from my own department of the profession, there is but one aspect in which the achievements of our distinguished guest are not supremely beneficent. He delves in rock and earth ; alas ! he constructs not in iron and steel. Unhappy iron and steel ! Could he but restrain his insatiable ambition to reconstruct this planet ; could he but intersperse his mighty works with some trifling steel railway from New York to China ; some trivial steel bridge from his own beloved shores to Albion, he would be enshrined as little less than a divinity, even in Pennsylvania. But, although not a constructor in steel himself, he is a cause of steel construction in others. The canal breeds ships.

And here I may, perhaps, be permitted to emphasize one engineering condition of a transcontinental canal, common alike to all countries and to all routes. The ship grows from year to year. The early Atlantic steamers were of a thousand tons ; the building Atlantic steamers are of eight thousand tons. This growth is by a law as inevitable as that of the tides. Doubling the lineal dimensions of a ship increases her resistance fourfold,

but it increases her carrying capacity eightfold. The larger ship can thus transport the greater cargo, at the higher speed, and at the minimum cost. There is but one practical limit to this economy—it is the *size and directness of the water-way*.

I was not called upon, however, to discuss engineering, but to praise it. Do we ever realize the gigantic difficulties it overcomes—its uncompromising struggle with nature, oft baffled, ever renewed, to ferret out the secrets of her power? Do we ever picture to ourselves the engineer, toilsomely planting his colossal works on precipitous mountains, in the open sea, under the river-bed, in the bowels of the earth, on bottomless and pestilential swamps—amid perils of miasm and fire-damp, wind and wave, caisson and explosion—with every toppling avalanche, and every subterranean stream, and every pent-up freshet just *waiting* to crack his bones and wipe out his works?

As you hold on to some headland against the hurricane, and feel the breakers shake the masonry of nature, his steamship plows its huge canal through forty thousand tons of that maelstrom in one single minute, with the coal one man can carry. The treasure-house of nature he despoils with his hydraulic engine; he raises from the dead the iron she had burned up through the ages. He disparts her continents to make way for his argosies, and spans her sea for his chariots of fire. Thus is engineering truly the intermediate power between nature and civilization; and from this high plane we recognize the guiding genius of our illustrious guest, and bid him hail!

But the genius of the master is proved, as well, by the accomplishments of his staff; the splendid professional and executive ability of his staff I would couple, as a sentiment, with the name of an engineer whom engineers professionally admire—a Dutchman whom New Yorkers instinctively love—Herr DIRKS.

REMARKS OF MR. JUSTIN DIRKS.

ASKING your indulgence for my bad English, I wish to express my thanks toward you and also toward M. de Lesseps, who procured me the opportunity and enjoyment of visiting

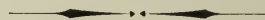
this metropolis of New York by inviting me to preside over his staff. Before the representatives of the several trades of this city I will be excused for giving a few figures regarding the saving for navigation which is to be realized by the opening of the Panama Canal. I made a publication in Holland about this subject, and this will be published also in English, for the question is resting too much on hypotheses and not enough on fact and figure. In basing my calculations on the well-known report of M. Lavasseur, I find for the trade of New York per year :

	Tons.	Saving in distance, miles.	Saving in millions of ton-miles.
To China.....	321,000	3,600	1,155
Japan.....	170,000	3,100	867
Australian Archipelago.....	133,000	900	119
Australia (Melbourne).....	75,000	2,100	157
British Columbia.....	20,000	6,450	129
San Francisco.....	644,000	6,600	4,250
Peru.....	644,000	4,950	3,187
Chili.....	644,000	2,550	1,642
Western Mexico and other Western ports.....	631,000	6,600	4,172
Sandwich Islands.....	86,000	5,700	490
The figures for Europe are :			
China and Japan.....	387,000	1,440	558
Totals.....	3,755,000	43,990	16,730

From information given by the European companies of navigation, which have about twenty steamers running, the value of one thousand ton-miles may be reckoned, including wages, food, coals, insurance and such expenses, to be \$1. If this be correct, the yearly saving for the general trade of the world will be \$16,750,000 when the Canal is built. These figures are based on the trade of 1879, so there may be allowed a good percentage for increase during the construction of the Canal. Moreover, the average speed of vessels along the old and new routes was considered the same, though the speed will be greater in the direction of the Canal, the new route generally crossing a lesser percentage of the trade-winds, and not having to meet the difficulties of the capes. Finally, the cargoes of vessels will be a shorter time out of trade, and the loss caused by damages of long sea voyages will be reduced. Taking all these into account,

I place the value of the Panama Canal, at the period of its opening, at \$30,000,000 per year, representing, at 5 per cent., a capital of \$600,000,000.

I wish to propose, gentlemen, the early completion of the Panama Canal. [Applause.]



International Law.

Its foundation is the brotherhood of man, its completion will be peace and good will.

ADDRESS OF DAVID DUDLEY FIELD.

When one reflects that international law is the body of rules to govern the intercourse of nations, he perceives that it is as important and extensive as the intercourse itself. The ship of war that sails from this harbor to carry its country's flag to the ends of the earth; the great steamer that goes out laden with travelers; the whaler that is to seek its game in arctic and antarctic seas; the little fishing craft that rocks and works on foggy banks and in fields of ice—all these are equally covered by its protecting wing.

It is the growth, not of one century, but of many centuries. Slowly have the nations yielded to its influence. Two opposite policies prevailed—the policy of isolation and the policy of intercourse. China and Japan present the latest instances of the former; our country, at least until lately, was the most significant example of the latter.

We, first of the nations, opened the gates of Japan. We demanded intercourse of the rest of the world as a right, we desired it as a benefit. It was a right because man is a social being, and his happiness is promoted by fellowship with his race, and because the products of the earth are the inheritance of all the children of men.

The aims of international law are peace and justice, and

these are promoted by intercourse with our fellows. It is with nations as with individuals. We view with indifference or distrust those we do not know; when we know them, we find that every human heart is human; we see good where we had expected evil, and we discover to our surprise that men are everywhere ready to interchange benefits.

The instinct of justice teaches us that nations are equal in rights, as the individuals who compose them are by nature equal. Before the law of nations the smallest and the weakest state stands the equal of the largest and strongest. A bully among nations is as wicked and detestable as a bully among men.

To multiply the facilities of intercourse is to multiply the agencies of peace. Whoever opens a new highway, by land or sea, is a benefactor of men; and if he places it under the protection of the nations by an international act, he gains a victory not less glorious than the greatest achievement of arms.

Our own country was the first to move in that direction. A great European publicist, Sir Travers Twiss, in a paper read two years ago before the Association for the Reform and Codification of the Law of Nations, said:

“The New World has in this matter taken the lead of the Old World, and the treaty of Washington of the 19th of April, 1850, has consecrated a principle applicable to all such enterprises in which the commerce of the world is interested. This principle is, that those great industrial works shall be exempt from all injury consequent upon disputes between particular nations, when they appeal to the arbitrament of the sword for the settlement of such disputes.”

The treaty thus mentioned is known as the Clayton-Bulwer Convention, made between the United States and Great Britain, in respect to the construction of a canal across the Isthmus of Nicaragua, and declared that the two governments were determined to give their support and encouragement to such persons or company as might first offer to commence the same with the necessary capital, the consent of the local authorities, and on such principles as accord with the spirit and intention of this Convention; declaring also that “neither the one nor the other will ever maintain for itself any exclusive control over the said ship canal”; that “vessels of the United States or Great Britain

traversing the said canal shall, in case of war between the contracting parties, be exempted from blockade, detention, or capture, by either of the belligerents; and this provision shall extend to such a distance from the two ends of the said canal as may hereafter be found expedient to establish"; that "they will guarantee the neutrality thereof, so that the said canal may for ever be open and free"; that they will "invite every state with which both or either have friendly intercourse to enter into stipulations with them similar to those which they have entered into with each other"; and that "having not only desired, in entering into this Convention, to accomplish a particular object, but also to establish a general principle, they hereby agree to extend their protection by treaty stipulations to any other practicable communications, whether by canal or railway, across the isthmus which connects North and South America, and especially to the interoceanic communications, should the same prove to be practicable, whether by canal or railway, which are now proposed to be established by the way of Tehuantepec or Panama."

Though this Convention of thirty years ago has borne no other fruit, it has consecrated a principle which will stand for ever hereafter firmly imbedded in the law of nations. Under its sanction let a great waterway be opened from ocean to ocean; let it marry the waters of Europe with the waters of Asia; let it bring manifold increase to the commerce and comforts of men, not for this age only, but for all coming ages; let the flags of the nations salute each other as they pass and repass; but let the blood of man never redden its stream or the waves of its inflowing seas. So let us add another to the agencies of civilization, and take one more stride toward "the good time coming."

And if the illustrious Frenchman, whose genius and indomitable will have opened the gates of the East through the sands of Egypt, shall yet open the gates of the West through the Cordilleras of Darien, he will earn a new title, greater even than the old, to the admiration and the gratitude of the generations to come.

Mr. Field was cheered heartily at the conclusion of his remarks.

The Institutions of Science in America.

ADDRESS OF DR. HENRY W. BELLOWS.

IN the absence of the learned Presidents of Harvard, Yale, and Princeton, expected here, and who would have responded with authority to your toast, I, an inexpert, and with no right to speak in the name of science or its schools, am suddenly called upon to say something in testimony of the respect which the directors of this banquet feel for science and its American schools; and of their relations to the project which our honored guest represents in so distinguished a manner. Fortunately one branch of science and one product of its schools has been most ingeniously and felicitously presented in the person and in the witty speech of Mr. Holley, who has clearly proved that science knows how to take care of itself in America, and asks little recognition from the representatives of the dependent and inferior departments of literature and arts! Mr. Holley's appearance and speech have recalled the memory of one who, by an inference from his eloquence and wit, I think must have been an ancestor or certainly a connection of his—the once famous Dr. Holley, of Boston, who was among the very first to transfer the culture and learning of the East to our Western wilds. Called fifty years or more ago to the presidency of Transylvania University in Kentucky, from Boston, where he had maintained a very high reputation in oratory and accomplishments, he was asked what books he should carry with him? "First, a dictionary," he replied, and it must have been an English one; "second, a dictionary," and it was probably a French one; and "third, a dictionary," it may have been a Spanish one. The astute doctor meant to say that there was but one language, under many forms; one truth, in many robes; and that all science and all literature at last resolve themselves into principles that know neither latitude nor longitude, tongue nor race, but are interchangeable by the aid of the dictionaries across all boundaries, east and west, all oceans, and all climes. And so it is

with science and its schools. There are American schools of science, but, happily, no schools of *American* science.

Science has her dictionaries and her representatives in all tongues, but she has no nationality, and sails under no one flag. Like the ocean variously named for the shores it bathes, it is always one. We talk of uniting the oceans! They are one to begin with, and all we can do is to make shorter cuts from one part to another of the inseparable unity. It is so with science! That, among its noblest representatives, knows no lineage of country or tongue, recognizes one great fellowship and community of truth, and hails as its own brother whoever articulates its discoveries or unveils its secrets, in whatever age or clime or tongue.

What to the man of science, what to science itself, is the question whether Léverrier or Adams first observed the disturbing force of Neptune, and predicted the appearance of the powerful stranger—true to the appointment of prophetic science, at a certain place and time—and thus made the faith of science fulfill itself? Interesting to rival astronomers the question may be; nay, to rival countries, fitly jealous of the fame of their scientists; but science belongs to humanity, and humanity knows no jealousies and petty personal squabbles even over scientific crowns. She is a democrat, and preserves her laurels for the truth and the fact, the principle, the discovery. Trojan or Tyrian are to her indifferent. Find the truth, prove the principle, establish the fact, answer the riddle—in Greek, Latin, English, French, anyhow—that can be translated into the universal language of algebra or chemistry, and you shall be adopted into all nations—a son of the universal parent of the race—a child of science—his universal speech.

It is becoming to the occasion to disclaim the nationality of science, here, in the presence of French, Dutch, Spanish, English, American engineers, who by community of action and mutual respect have done so much to promote international works, and are proposing together to accomplish still greater ones. And it is always enlarging and refreshing—in view of the partisan squabbles and theological or rather sectarian wranglings and animosities of the world, and its tribes and cliques—to fall back upon the peace of the multiplication table—the truce

of God, in the demonstrated and calmly fixed and certain things that are no longer at the mercy of speculation, and are beyond the disputation of schools. Science has her own doubts and difficulties, her yet unknown and unexplored lands, her puzzles and mysteries; but she has her *terra firma* too—her fixed and known, because surveyed and finally described and inclosed regions. And thanks to those great unifying minds that have discovered universal principles, whether of gravitation or of oneness of constitution in all worlds, or oneness of plan in nature—whether it be Newton, Kepler, Bunsen, Kirchhoff, Helmholtz, Huxley, Faraday, Owen, Agassiz, Henry, Marsh—thanks to all and every one that make us feel how infinitely superior what is common and universal is to what is local, temporary, accidental—for he is a man who belongs to the world and the race; no Frenchman, no American, no Italian, no German—but greater than all—in the simple title of a man—and own brother to all men everywhere.

When the transit of Venus was to be observed, nations vied with each other in friendly rivalry, to see who should do most to increase the accuracy of the measurement of the distance between the earth and its great visible parent the sun—the material, sublime symbol, though the infinitely unworthy representative of the unseen Being who hung it in its place as easily as men hang up a lantern in their entries. It was a glorious thing to see the enthusiasm of scientists, equal to the sacrifices required, and a noble tribute to the unidolatrous worship which the scientific Apollo receives in all tongues and classes. We are all alike interested in knowing just how near and just how far that deity is, for, if the earth should nod her pole ever so little in the sleep of science—not wide-awake to her charge—we might find the sun playing one of his old tricks anew, and melting out the northern pole and freezing up the tropics. Let American and all other schools of science consider that we want due warning if any such considerable changes of climate are under consideration in the sun's cabinet! The least whispers from that shrine are worth the keenest ear that science can apply in nightly watches, or stealings by the telescope on the unguarded mutterings of the sun's nearest attendants; and Venus has not seldom been known to be the betrayer of court secrets.

And when the secret of the north pole, and what the state of his immediate temperature is—and his magnetism, and whether he is ready to act as white rod in the procession of commerce through his frozen seas, and betray the Thermopylæ that defends his dominions by some showing of a secret pathway round the ice-rocked pass—came up, what a flutter of sails, what a rivalry of enterprise, what a fleet of obstinate little ice-cutters, what a rally of heroic Northmen—vikings of battle—have we seen from all the great and some of the smaller nations, recognizing the cry of science to her children to drop all meaner things and join the crusade against the pole! What success for commerce has been or will be achieved is yet uncertain. But there has been one grand success. It has been the magnanimous readiness to ignore national pride and recognize heroic scientific enterprise from any quarter; and the world has not, as is too often seen, reserved all its praise for success. It has cheerfully paid it, also, where success was deserved, if *not* achieved.

There are many souvenirs connected with this occasion for us older men. In speaking of the community of science, I am reminded of the community of liberty; and that recalls the image of a friend of liberty, and therefore of America, who, in my childhood—and it must have been about the time when the Monroe doctrine was declared (1823-'24), came to see the country to which, long before, he had offered his sword and his heart—Lafayette, the friend of Washington and of our Revolution! I recall his face and his very dress—nankeen trousers and gaiters and vest, and a frogged surtout—as he bent his benevolent face upon the children of the common schools of Boston, drawn up in file to see the nearest and dearest friend of the Father of his Country. I almost seem to see him again (perhaps only from some identity of Gallic expression) in the features of our guest, as he sheds his benignant smile upon the descendants of the fathers to whom the French patriots, and Lafayette especially, were as brothers.

But, Mr. President, I wander. There is another community, the community of interests to which engineering science, as Mr. Holley has proved, is the essential and most direct friend—that fellowship of nations which are cemented, if I ought not

rather to say melted, into one, by the freedom and the equality of commerce, the removal of obstacles natural or artificial to its course; and among these obstacles, the most obstinate of all, false political economy, the fallacies of protection, and the lumbering rubbish of a multitudinous list of taxable imports; and worse than this, the sensitive and self-destroying jealousies, which prevent the world and the nations from seeing that they have an identical interest in promoting universal peace, universal liberty, and universal education; that it is all a puerile folly to think that everything one nation gains another loses; that everything one loses another gains; that every sound and permanent bargain must not be beneficial to both and all parties to it; that treaties that are unjust do not contain their own fracture in their cunningest seams; that frankness and honor are not the only skilled diplomats, and that wars of conquest and annexation and invasion are not miserable substitutes for the victories of peace—the welcome and auspicious annexations effected by a genuine commerce, which weaves silken cords around nations, and makes them fortunate tributaries to powers that can increase and multiply their wealth and their comfort. I would not be extravagant in my hopes, for I know the slowness of men to understand their own interests! Would to God self-interest were a tenth part as powerful as those who despise humanity are fond of asserting it to be! “If,” said Butler in his “Analogy,” “conscience had might as it has right, it would rule the world.” If self-interest were understood, or even if it were not overruled *when understood*, by passion, envy, pride, precipitation, it would proclaim eternal and universal peace. But though self-interest is a slow bond, it is a sure one, and it grows stronger and stronger every age. But I know nothing that has enlightened self-interest so much, and brought the sorrows and perils of international hatreds and war into such an odious light, as the spread of commerce! And God knows that national jealousies, old feuds, new ambitions are the chief scourges of humanity; that the standing armies they create are the great devourers of widows and children; and the wars they provoke bury under taxes the millions they do not bury in battle-fields. It is the hoof of these standing armies that is now most deeply wounding the breast of humanity—the cannon’s weight that is

pressing heaviest upon the heart, and keeping down the rising hope of better times for the common people. I hate them and all their works and ways; and the devil, and not the Father of Jesus, is the true god of battles. It is the Lord of the peaceful hosts of industry that Christ calls to the help of the mighty. It is hell that is really invoked when nations rage furiously against each other. It is the survival of the wild beast in us that enjoys and riots in blood and bones. Ah! when shall the spear be turned into the pruning-hook? Not, though all the world were one succession of Peace Societies and one great army of missionaries, *until* nations are bound together by commercial enterprises, free trade, and the freest coöperation of common interests; not until there is such a perfect interweaving of interests, and such a perfect intermatting of mutual dependencies, that universal peace is everybody's interest, and his interest is brought home to him by the rise and fall of the stock-market, made essentially one and the same for all the world. It seems a mean security—that of selfish interests! But I am confident that God has not planted self-love so deeply in man without an object, and that selfishness is capable of a glorification by a better understanding of its causes and its outcome, which will make us more willing to trust the elevation as well as the security of man to commerce, which, having been usually the best missionary of religion, is destined to become the great apostle of peace! It is a certain fact that intercourse, acquaintance, facility of *transit*, and habit of intertrading make the prejudices and hatreds that lead to war less possible. Every Englishman that comes to America for trade or for curiosity carries home a bond of peace in his heart, and adds to the prospects of a good understanding in any difficulties with us and Great Britain about fisheries or tariffs, and every dollar invested in our bonds or in the ships that fetch and carry for us is a pledge of peace. I am not concerned about having our shipyard on the Clyde, and not on the Kennebec or Penobscot, so long as England has her wheat-fields in Illinois. I don't care how closely nations become interdependent. The old notion of having everything at hand and on hand and within ourselves, because of the possible consequences in a war, has *made* the very wars it was guarding against the results of! I wish all the "villainous saltpeter" in

the earth were owned by the Quakers, and that they would not sell a pound of it, except under bonds to Mr. de Lesseps and his like, to use for rock-blasting purposes! I wish every nation had so much at stake in the peace and prosperity of every other nation that it could not think of fighting, until every expedient had been exhausted by arbitration. You think, perhaps, we should then lack, spirit, heroism, greatness, generals, and heroes! Well, military genius and greatness ought to be *admired*, seeing it can so seldom be blessed; seeing it costs so much to make one military hero, whose triumphs are over seas of tears and blood. But the day is coming when peace will have her victories greater than war; when the inventors, the benefactors, the way-openers, the peace-makers, will take their turn *at glory*; when he who carries peaceful generations through the Alpine tunnels will be greater than he who carries hostile armies in winter over the summits of the Alps. Fighting seas, and ice, and sand, and mountain ranges, in the interest of human intercourse, will honor men and develop courage and self-sacrifice, which will outtell and outlive all the glories in that dreadful trade, that with one foot on a rolling shell, and the other on a fresh corpse, beckons Alexander, Cæsar, Napoleon, to take in turn the bloody cup and quaff in its glory the curses of widows and children, and the groans of labor, and the despair of virtue, and the distrust of a God of love and justice!

It is as an apostle of peace—because an ally of international commerce—that I would hail M. de Lesseps. No ravening vulture, with bloody beak and claw, could have my honor, flew he ever so proudly across our sky! It is the white-winged dove of commerce that we hail and welcome in him and his project. It is a project not of fear and dread, founded in military jealousies, but of faith and hope resting on the growing sense of the unity of human interests, which is more and more articulate in commerce as it better understands its errand and its own success.

Never did Nature seem to throw down her glove with a more obvious challenge than in the Isthmus of Panama! The taunt or the directness of the defiance has been felt for two hundred and fifty years, if not longer. But the glove, though examined in all its fingers, has not been taken up! It looks as

if the Creator had, by his great molding and cutting instruments, the winds and waves, really nearly completed the canal, a strait he meant to place, just at that most vital point! He had thinned away the continent on both sides until the dash of the waves from either ocean might be heard mingling their hoarse voices, or some bold traveler, erect "upon a peak in Darien," might see at once the gleam of the separated waters. But it is as if just at this point he had paused and said to himself: "What I can do with one stroke of my finger, I will leave to my son Humanity, to test his whole courage and heroism upon! The world is built not for the glory of Him who made the stars, but to nurse the powers of God's children; and for the education of science and art, and for the schooling of commerce and the glory of humanity, I will leave this work to man. Here shall stand these rocky gates, unopened, right in the natural pathway of the future commerce of the world! Here these adamantine doors shall hang, unhinged, unturned, until Humanity develops faith, courage, and fellowship enough to burst them open, in the interests of universal peace and international life! That day will come! Some De Lesseps shall stand here, and speak the open sesame of science and engineering art—the true legend of peace—and the doors, not on harmonious hinges, but on thunderbolts of detonating powder, shall fly apart, and righteousness and peace shall kiss each other, as the angry Atlantic drops his violent arms to embrace the gentle Pacific—the future, brighter, safer sea of the new *front* of the world!" By chance we turned our capital round, its back door front. We shall do a stranger thing than that! We shall make the Pacific ocean the scene of the commerce that has hitherto left it the quiet home of seals and gulls! I have sailed it for days without meeting a single vessel. Should the isthmus be pierced, and it certainly will be, our children will see the Pacific swarming with the ships of all nations, and the Atlantic largely deprived, by the use of its more southern paths, of the power to affright and baffle the commerce of the world.

I am struck, as all must be, with the magnificent freshness, enterprise, and youth of the man who sits here crowned with the triumph of a desperate but successful victory over the divorce of Europe and Africa—the maker of the Suez Canal—

and who sighs, in the extra decade of human life granted to few, to marry the parted oceans of the world together in the Western hemisphere. He is an illustrious example of the rejuvenatory power of lofty conceptions. "Give me a great thought to support me," said the dying Herder to the friends that surrounded his couch! Just about the time men usually turn their faces to the wall and give up the ghost, De Lesseps seems to have said, "Give me a purpose worthy of immortality, and I will recommence my youth." And the Lord heard him; he got back twenty years, by abolishing the sandy isthmus between the Mediterranean and the Red Sea, and has all the time he saved navigators added to his life. He will get back (he has half of them in hand) twenty more, by breaking the ban that separates the Atlantic from the Pacific! Who shall tell the sympathy the ever-young powers of nature and grace have with those who trust their inspiration, and become the channels and instruments of their vast purposes? The tides of youth rush into the aged veins that open to fresh inspirations! Death is abolished for those who have not time to die, and the most urgent and disinterested purposes still to live for. Old age retires before the heart of youth that lives behind its mask, and the true Faust drinks an elixir, not from the hands of the devil, but from the chalice of God, when he accepts the conditions of restored youth and beauty—the carrying out of divine purposes against obstacles before which timidity and self-love have quailed and become servile, but which yield themselves gladly to be carried through by faith and invincible hope, and then give their own youth to those who ignore age and death in the undertaking!

When I was young and a student of the classics, the only isthmus we knew, and it needed no other name, was *the* isthmus. It was at Corinth—where I have since been—and united the Peloponnesus with the main continent of ancient Hellas. There, as if by a certain instinct of the meaning of isthmuses, the Greeks had for ages placed the scene of their Isthmian games—like the Olympian—the strife in athletic and gymnastic skill and strength—adorned with recitations in verse—among those who contended for honors, and a place for their statues in the great temple of Neptune near by. The Athenians held by

prescription the seats of price at these spectacles. Sisyphus and Theseus were boasted of as their founder and perpetuator. They did not know that they were only preluding games greater than their own; that a striver more wonderful than any Greek athlete would one day run a race and make a wrestle for the victory over the main isthmuses of the globe, and become the greatest hero of Isthmian games that verse ever sung! And, if we have no sufficient place in our temples of Neptune—the commercial exchanges of the world—for his statue, we will give him a holier shrine! We will place him in the temple of eternal memory—in the heart of humanity—the only place worthy for those who create and preserve the peace of the world, and design and achieve the works that abolish distance and time, and give the scattered nations the sense of the oneness of humanity—alike the glory of God and man!

I can not sit down without thanking you for your patient hearing. I hope M. De Lesseps will never have to pierce the stony isthmus that separates a public orator at midnight from a tired and over-filled audience at a dinner-table like this. If I have done it in any degree, it is due to the favor with which hopeful and generous thoughts are always welcomed by New Yorkers. I will repay your endurance and generosity by introducing Mr. Gowan, President of the Philadelphia and Reading Railroad, who I am sure is too well known and too much liked to have any risk in again appealing to your jaded attention.

The Army and Navy.

REMARKS BY GENERAL SCHOFIELD.

GENERAL SCHOFIELD, in response, said that it seemed to him this was a time in which little should be said for the army and nothing by it (laughter), and he would only say that he hoped the grand enterprise they were there to celebrate would be done, so that the soldier could continue to smoke his cigar in peace, and not be called upon to interfere. (Applause and laughter.)

American Projectors of an Isthmian Canal.

ADDRESS OF FREDERICK M. KELLEY.

IN addition to the high considerations of personal respect for our distinguished guest, and the eminent gentlemen accompanying him to the United States, I am sure those who have embarked their time, hopes, and fortunes in the prosecution of a great enterprise will appreciate the pleasure with which I join the citizens of New York in extending to them a hearty welcome.

Through the experience and powerful influence of M. de Lesseps, whose name is justly celebrated in both hemispheres, we may anticipate the day is not far distant when the project of uniting the two oceans by canal, which bold and enterprising men have struggled for, will be realized.

It is no exaggeration to say, the grandest and most important enterprise of this age of engineering marvels is that which assumes to give a sea-level canal across the American Isthmus, through which all classes of ocean steam and sailing vessels may pass quickly without the delays, expenses, and dangers of lockage.

No intelligent person can fail to see that the execution of such a work deeply interests the commercial growth and prosperity of all nations, *especially ours*. It would place the United States geographically in the center of the trade of the world—bring the vast commerce of the Pacific Ocean and the East to our very doors, stimulate and build up trade in localities where it now has no existence, renew the freedom of international relations on the grandest scale, and do much toward making New York the chief commercial emporium of the world.

The sailing distance saved by the canal between New York and San Francisco, over Cape Horn route, would be about 14,000 miles ; between New York and Panama, 11,000 miles ; Callao, 10,000 miles ; Valparaiso, 8,000 miles ; Guayaquil, 10,000 miles ; Sandwich Islands, 9,000 miles ; Australia, 5,000 miles ;

Canton, 10,000 miles; Shanghai, 11,000 miles; Calcutta, 9,000 miles; and to other trading ports in the Pacific Ocean the distance saved would be according to locality.

From careful statistics, made by me in 1858, it was shown that the commerce of the United States would save *then*, by the use of the canal, in insurance, freights, interest, wear and tear of ships, and other expenses, \$35,995,930; England would save \$9,950,348; France, \$2,183,930; other countries, \$1,400,000; thus making an annual saving to the commerce of the world of \$49,530,208.

Estimating the average value of ships at \$50 per ton, the total value of vessels and cargoes which would pass annually through the canal was as follows: United States, \$193,168,937; England, \$190,649,584; France, \$67,210,609; other countries, \$16,802,000; making a total of \$467,831,130.

During the ten years previous to 1858 the ocean trade of the United States increased 93 per cent., England 110 per cent., and France 130 per cent.; thus showing how rapidly the commerce of the latter country was encouraged and built up in the excellent reign of Napoleon III.

Throwing out of consideration all of Europe's trade with British India and China, which would go through the Suez Canal, I claimed for the American Isthmus Canal the following tonnage: United States, 1,857,485 tons; England, 1,629,295 tons; France, 162,735 tons; other countries, 44,555 tons; total, 3,094,070 tons, which could be depended upon in 1858.

From the carefully prepared statistics of the Paris Canal Congress, in May last, it was shown that the tonnage ten years hence would amount to 6,000,000 tons, thus showing an increase of 3,000,000 tons during thirty years. At this rate of increase there are boys now walking the streets of our city who will live to see from fifteen to twenty million tons of shipping pass annually through the canal.

With these important considerations before us, continually increasing in magnitude, what does the expenditure of \$50,000,000, more or less, signify in building a *deep, wide, sea-level canal*, with good natural harbors, easy to reach during any condition of the tides or winds, and which for capacity and durability shall last and satisfy the ever-expanding wants of trade for all

time? This is what the commerce of the world demands and will have through the narrowest part of the Isthmus, in order that all classes of vessels may pass cheaply, on an even keel, in a few hours instead of days, cost what it may.

In view of the vast and rapid accumulations of wealth among civilized nations, and the expenditure of three thousand millions of dollars in building 80,000 miles of railroads, which traverse our country in every direction, crossing great rivers on bridges of enormous span, and climbing bold mountains where a few years ago travelers hardly dare venture, hauling the fruits of industry thousands of miles over hills, valleys, and through tunnels from one locality to another—and in view of other great engineering works of utility and strength, in this country and Europe, too numerous to mention—how can we doubt the feasibility of making a thorough cut, *without locks*, through the Isthmus, and thus breaking down the stupendous barrier of the Cordilleras, relieve the commerce of the world, even if it should cost two hundred and fifty millions of dollars?

The State of New York alone has spent in public improvements more than that sum; but, as the citizens of all nations are invited to join in the work, the money-markets of the world will be thrown open to the company for the subscription and sale of its stock and bonds.

The advantages of a short sea-level canal, with good natural harbors and facility, economy, and speed in passing large ships, and the very much less cost of maintenance, are so great, it would prove a great misfortune to build a canal *via* any long route, encumbered with bad harbors, requiring continual improvements to keep open numerous dams and eighteen to twenty locks, in constant danger of being destroyed by floods, earthquakes, and uncontrollable ships in breaking through them.

A canal by the Nicaragua route would doubtless accommodate the small classes of vessels engaged in our coasting trade, if the tolls were not too high; but for the vast commerce of the Pacific Ocean, where steamships are destined to achieve their greatest triumphs, it would prove inadequate to the wants of traffic carried on in large vessels, the size of which is being increased yearly.

A short sea-level canal is certain to be constructed; hence the

Nicaragua Canal, if built, will become worthless, and remain a decaying monument of financial and engineering folly, as the former, affording the greatest speed, safety, and economy for the passage of ships, would monopolize the business.

As the passengers, mails, and light freights between New York and San Francisco will continue to go by our great continental railways, and the distance from New York to Greytown and Aspinwall being about the same, and as at least sixty-five or seventy per cent. of all the Pacific trade passes west or south of Panama, the Nicaragua Canal, even if short, with good harbors, and without locks, would present no advantages over the Panama route to American commerce; hence it can not be justly styled "the American route" any more than several others which have been surveyed and advocated by Americans.

When, in 1852, I first began promoting ship-canal surveys, but little or nothing of the climate, geology, geography, or botany of the Isthmus was known. The Tehuantepec route had been examined by Cramer and Williams, the Nicaragua by Baily and Childs, and the Panama route by Lloyd, Garella, Totten, and Trautwine; but all that portion extending south and east of Panama was covered from sea to sea with a deep, dense growth of tropical trees and vegetation, through which no person had passed with instruments to give anything like correct information upon which to base the possibility of a canal.

The Pacific Ocean was supposed to remain the highest, and if a thorough cut were made through the Isthmus at Panama it would flow into the Atlantic, and drown out New Orleans and the West India Islands.

We had some old Spanish maps and Indian stories of the country, but, these proving worthless, my faithful engineers were obliged to pursue their trackless journey across rivers, through swamps, and over mountains densely covered with vegetation, every foot of which had to be cut for the party to advance, with nothing but the compass and spirit-level to guide them, not knowing where, or under what circumstances, they would reach the Pacific Ocean, with the fear and great difficulty of procuring supplies ever staring them in the face.

Guided by the opinions of the illustrious sage and pioneer of all science, Baron von Humboldt, who, having procured

information from the archives of Mexico, Bogota, and Madrid, urged more than seventy years ago the importance of surveying the Atrato River, and called attention to what he supposed to be true, that in 1788 the Indians, under the direction of a priest residing at Novita, had dug "a small canoe canal" between the head waters of the Atrato and San Juan Rivers, and thus establishing water communication from sea to sea, I resolved to make an examination of that country.

The first party, sent out in 1852, was in charge of Mr. John C. Trautwine, the eminent Civil Engineer of Philadelphia, who may be justly styled the pioneer surveyor of the Atrato Valley. Entering the Gulf of Darien, Mr. Trautwine ascended the Atrato River two hundred and twenty miles to Quibdo, and from thence advancing to the Rispadura Isthmus, and finding that the "canoe canal" mentioned by Humboldt was a myth, he descended the San Juan to the Pacific, and thus completed a careful survey from ocean to ocean, three hundred and sixty miles in length. Retracing his steps to Quibdo, he examined several passes leading to the Pacific by the Napipi, Beaudó, Pato and other rivers, and, returning to New York, reported against the route.

In 1853 I fitted out two engineering parties, and, placing one in charge of Mr. Noah B. Porter and the other in charge of Colonel James C. Lane, instructed them to follow up Mr. Trautwine's survey to Quibdo, and from thence examine other passes leading to the Pacific, higher up or lower down the Atrato at that place. Finding nothing in the vicinity of Quibdo at all suitable for a canal, they returned home, and reported accordingly.

Being satisfied that the proper proportions of a ship canal, *without locks*, could not be found at so high an elevation above the sea, in 1854 I sent out a fourth party of engineers in charge of Colonel Lane, with instructions to ascend the Atrato to its confluence with the Truando, and from thence level across to Kelley's Inlet, on the Pacific Ocean. From this survey I indulged the highest hopes of success; but, on account of fever caught at Aspinwall on the way out to Carthagena, the party was so much reduced and demoralized that Colonel Lane, with but one man capable of doing duty, could only reach the Cor-

dilleras on the Atlantic side, and, thus failing to connect his lines with the Pacific, the survey proved a failure.

Sufficient information, however, was obtained to induce me in 1855 to fit out and send to the Atrato Valley a fifth expedition, which was placed in charge of Captain William Kennish, an able engineer, with instructions to cross the Isthmus at Panama, and, sailing down the coast to about $6^{\circ} 57' 32''$ north latitude, begin the survey on the Pacific side, instead of the Atlantic, where all the previous surveys had commenced. Under the intelligent management of Mr. Kennish this examination resulted in finding the *first and only feasible route without locks, gates, or dams* for a ship canal two hundred feet wide and thirty feet deep, including a tunnel three miles through the Cordilleras. The distance from ocean to ocean was found to be about one hundred and thirty miles, and the estimated cost of the work \$150,000,000.

Without giving more details of the various surveys made under my direction, as they can be found in the reports of the engineers, suffice it to say, as soon as Mr. Kennish's maps and report of the Atrato-Truando route were finished, I went to Washington, and, calling on President Pierce and the members of his Cabinet, requested a government verification to indorse the accuracy of the surveys, and thus give official character to the enterprise. For the want of an appropriation to defray the expenses, this was declined, and I left Washington, after a month's stay, with Mr. Pierce and Mr. Jefferson Davis most favorably impressed with the feasibility of the project; but Mr. Marcy and other members of the Cabinet considered the possibility of building a ship canal across the Isthmus at least two hundred years in the future.

In November, 1855, I concluded to visit Europe and invite the English and French Governments to join the United States in making a verification of the surveys, and, if possible, induce those maritime powers to pay the interest upon the stock of the Company during the construction of the canal, and guarantee its neutrality in peace and war, as that seemed then the most feasible plan for consummating so great a work as a ship-passage through the American isthmus.

Reaching London, I proceeded at once to Berlin for the pur-

pose of showing Baron von Humboldt the first real survey of the Atrato Valley, which he had advocated fifty years before. The Baron was very much pleased with my plans, and, on leaving Berlin, wrote me a long letter expressing his views upon the subject, some of which I will read, as they seem so pertinent to the occasion that has called us together this evening: "The object to be obtained, in my opinion, is a canal which will unite the two oceans, without locks and without a tunnel. When the plans and sections can be laid before the public, a free and open discussion will elucidate the advantages and disadvantages of each locality, and the execution of the work will be intrusted to engineers who have successfully distinguished themselves in similar enterprises. The Canal Company will find subscribers among those governments and citizens who, yielding to a noble impulse, will take pride in the idea of having contributed to the construction of a work worthy of the intellectual progress of the nineteenth century. More than fifty years ago I earnestly expressed these opinions, and ever since have incessantly labored in the propagation of those geographical views which tend to prove the feasibility of establishing commercial communications, either by canals, with or without locks, or by means of railroads uniting opposite coasts and rivers flowing in contrary directions."

Returning to London, I presented my plans to Lords Palmerston and Clarendon, who, then at the head of the British Ministry, frankly expressed a willingness to join the French and American Governments in making the surveys, and aid in building the canal.

While in London I had the plans presented and discussed before the Institution of Civil Engineers and Royal Geographical Society, at meetings called for the purpose. These discussions lasted four evenings, during which the leading engineers and scientific men of England took a prominent part, as will be seen by referring to the published reports of those societies at the time.

It was there I first had the pleasure of making the acquaintance of M. de Lesseps, who was urging the Suez Canal, which he successfully constructed, and, thus having built one lasting monument to his memory on the Suez Isthmus, is now engaged in the peaceful and laudable undertaking of erecting another on

the American Isthmus, in which I wish him godspeed, as, to use the language of Humboldt, he has "successfully distinguished himself in similar enterprises."

From London I proceeded to Paris, and presented my plans to the Emperor Napoleon, who was ruling with great sagacity one of the most intelligent and enterprising nations in the world. His Majesty received me cordially, and, after examining them with great care, expressed a willingness to unite with the English and United States Governments in making the survey, and also urged the propriety and wisdom of the three Governments building the canal, and opening it free to the commerce of all nations, save a small toll, sufficient to keep it in repair.

In the spring of 1857 I returned to New York, fully convinced that the governments and leading men of Europe took a more lively interest in the importance and success of the canal than those of this country.

Congress in the mean time, at my solicitation, having passed an appropriation to defray the expenses, I went to Washington, and, calling on President Buchanan, he declined to invite the English and French Governments to join in the survey, notwithstanding that, while our Minister in London, he strongly sustained the policy of making the canal international in its character.

Disappointed, but not discouraged, I remained in Washington long enough to show my plans and maps of the route to the joint commission of army and naval officers, who were organizing an expedition according to the act of Congress ordering a verification of my Atrato surveys.

The engineering party was placed in charge of Brigadier-General N. Michler, U. S. A., who, assisted by the Navy, made, in 1858, a thorough and exhaustive examination of the above route from sea to sea, substantially confirming Mr. Kennish's survey, as will be seen by referring to the voluminous and complete report of that able and distinguished officer, printed by Congress in 1861.

In the mean time, having become strongly impressed with the good harbors and remarkable shortness of the San Blas route, and the favorable opinions expressed by Messrs. Wheelwright and Hopkins, of England, of the Pacific portion they

examined, I concluded to have it surveyed; and, in 1863, assisted by two generous and public-spirited gentlemen, Mr. Cyrus Butler and Luke T. Merrill, of this city, who furnished the means, I sent out Mr. Norman Rude, who, with native assistants, ran a barometrical line for the purpose of procuring approximate heights and distances only—it being quite clear a tunnel would be necessary. This resulting favorably, we decided to have the route regularly surveyed, and, in 1864, I sent to the Isthmus my *seventh engineering party*, which was placed in charge of Mr. A. McDougall, chief engineer, Mr. C. A. Sweet, first assistant, and Messrs. Rude, Fountain, and Foreman, assistant engineers, with instructions to run a line of levels and chains, in order that no errors should occur in the measurements of any portion of the route.

Commencing on the Pacific side they ascended the Bayano River to the “great bend,” and from thence, *via* the Mamoni, crossed the mountains to within about three miles of the Gulf of San Blas on the Atlantic, where the party were stopped and turned back by the Indians, who then were opposed to the intrusion of strangers. Sufficient data, however, were procured to decide that the route was only about 30 miles long from ocean to ocean; and of this 10 miles is the Bayano River, which, with little improvements, could be made ship navigation, thus leaving but 20 miles for canalization. The 20 miles, however, includes a tunnel 7 miles long as surveyed by my engineers, and 10 miles long as calculated by Commander Selfridge, who made a *hasty* and *partial* examination of the route in the spring of 1874. The harbors at both termini are good, and the quantity of materials to remove for a canal 125 feet wide at the water-line, and 28 feet deep, is much less than on any sea-level route known; besides, the longest slope of open cutting is on the Pacific, the most free from floods, and much the driest side of the Isthmus; and the canal located *there*, through an open plane out of reach of drainage, I believe, would cost less and remain more permanent than anywhere else.* Although long and

* Assuming the tunnel to be 7 miles long, 80 feet wide, and 125 feet high from canal bottom to crown of the arch, and the canal outside of the tunnel to be 125 feet wide at the water-surface, and 28 feet deep, the total quantity of material to excavate would amount to 29,389,828 cubic yards, of which 25,543,939 cubic yards

careful study of the question has convinced me that the San Blas route is the shortest, cheapest, and best, I do not for that reason only urge it upon public attention ; but, before deciding so great a question as the only route for an inter-oceanic canal, I would strongly recommend a thorough survey, in order to determine the possibility of shortening the tunnel by flanking the sugar-loaf-shaped chain of hills which cross the route at right angles.

In 1866 I went to Washington, and furnished the deeply lamented Rear Admiral C. H. Davis, U. S. N., a large amount of engineering and commercial data to aid in making his report, called for by Congress, and also assisted Senator John Conness, of California, in procuring appropriations which led to the surveys of Commander Selfridge, Lull, Collins, and Menocal.

As Admiral Davis took a prominent and lively interest in promoting the project, I take the liberty of reading a letter from that accomplished and distinguished officer upon the subject.

“ WASHINGTON, April 6, 1866.

“ *Frederick M. Kelley :*

“ DEAR SIR : I have received your letter of the 4th inst., and am very much obliged for your offer, and shall endeavor to profit by it on my way through your city, as I shall have occasion to go North before my report is completed. It is undoubtedly the intention to ask Congress for the means of making new surveys, for the purpose of obtaining a knowledge of which you seem to be already possessed—that is, a shorter route than any made known to the public. You will observe that the resolution contemplates the necessity for renewed examinations. Now, what I would like to have from you is, not your own surveys to accompany my report, but such suggestions as will ena-

is rock, and 3,846,889 cubic yards is earth ; and thus the canal passing through rock will require no walling, to keep the banks from falling in during heavy rains, and the structure would remain as durable as granite itself. Estimating the heading in the tunnel at \$20 per cubic yard, the break-down at \$5 per cubic yard, open-rock cutting at from \$1.50 to \$2.50, earth at from 50 cents to 75 cents, masonry at \$15 per cubic yard, concrete \$7 per yard, pumping \$2,000,000, tidal locks, and lining the tunnel its entire length if necessary, the total cost of the canal would be \$136,020,704, including 25 per cent. for contingencies.

ble me, in replying to that part of the resolution which inquires 'whether the Isthmus of Darien has been satisfactorily explored,' to guide or counsel the legislation of Congress in the proper direction. I do not intend or expect to take part myself in any future explorations of the Isthmus, but I desire, now that the opportunity presents itself, to use my humble efforts to give a new impetus to this noble project. A very small fraction of the expenditure caused by the late rebellion would open a ship canal between the two oceans—an achievement suited to confer such great benefit upon mankind by extending commerce and national intercourse, and thereby promoting good will and peace on earth, that it may almost be regarded as a work performed in the service of God.

“Very respectfully and truly yours,

“C. H. DAVIS, Rear Admiral, U. S. N.”

During the winters of 1877 and 1878 a large party of French engineers, in charge of Lieutenant Lucien N. B. Wyse, made several careful surveys between the Gulf of San Miguel and the Atlantic to find a sea-level route in that locality, the details of which will be found in the able report of that excellent officer. He also examined the Panama and other routes, and among those who suffered dangers, hardships, and privations, to find a pass through the dark, dense jungles of the Isthmus, where nothing disturbs the solemn stillness but roaring waters, howling beasts, and screeching birds, as the storms sweep over the forests, his name, with Trautwine, Totten, Lane, Porter, Kennish, Rude, McDougall, Sweet, Michler, Reclus, Menocal, Lull, Collins, and Selfridge, should be placed high up on the list of “great explorers of the Isthmus.”

Now, with all the proposed canal routes, extending from the extreme Tehuantepec north to the extreme Atrato San Juan south, partially or wholly examined, and the feasibility of each, for locks and no locks, tunnels and no tunnels, with good and bad harbors, those that were long and short, for all practical purposes sufficiently determined, and the favorable combining circumstances of time, men, and money having come to begin the great work, what could have been more just, wise, and liberal than calling the Paris Canal Congress, in May last, to dis-

cuss and decide the question of route, having in view the forcible and paramount considerations, the cost of the canal, and its maintenance, capacity, and permanence, economy and quickness in passing all classes of ocean steam and sailing vessels, without regard to the commercial interests of any particular nation.

To the Congress promoters and engineers of the various routes were invited to attend, with their maps and reports, and take part in the discussions, and, to add importance to the convention, M. de Lesseps consented to act as president, and give the weight of his experience and wisdom to its deliberations.

To all intelligent persons it was quite clear the contest between the advocates of a sea-level canal and those who urged canals with locks would be strong and earnest, and that M. de Lesseps would throw his great influence in favor of the former.

Now, in view of M. de Lesseps assuming the great responsibility of raising the necessary capital to build the canal, I think he, of all men, should be consulted, and have the right to decide on which route the stockholders' money shall be spent, as to him especially they will look for its economical and judicious expenditure.

Having constructed one sea-level canal which in every respect has proved successful, and with two feasible sea-level routes in view, I can not see how he conscientiously could have done otherwise than reject the long Nicaragua route, encumbered with its numerous locks, dams, and bad harbors.

Although invited by M. de Lesseps, I was unable to attend the convention; but my maps were presented and urged upon its attention by the kindness of Lieutenant Wyse and Mr. Nathan Appleton, of Boston, a gentleman well known for his devotion and untiring zeal in promoting the welfare of the project in this country and Europe during several years past. Had I been present, I would have voted in favor of the Panama route, with recommendations that the San Blas route be surveyed before commencing the construction of the Canal, as, for reasons before given, it may prove the best.

All assertions to the contrary, the Paris Congress, comprising honest, able, and intelligent gentlemen from nearly all civilized countries, was called and conducted in good faith, and the

wisdom of its decision in favor of a sea-level canal by a large majority will be indorsed by the sailing masters, shipping merchants, and marine-insurance companies of the world, as they, after all, represent the only class of industry that will use the Canal, and direct the course it shall take in quest of speed, safety, and economy.

During my long twenty-eight years of unceasing labor in promoting the project, like all persons who engage in great and useful enterprises, I have been forced to exercise a vast deal of patience in overcoming the various obstacles thrown across my path, among which is the famous Monroe doctrine. But, not discouraged, I continued on, ever believing that when the time came to organize a company, in this country or Europe, to begin the work in earnest, the people of the United States, actuated by noble and generous impulses, would take pride in contributing freely to its success, especially in view of the fact that one half of the benefits conferred will accrue to American commerce, provided, however, the Company is honestly managed and kept beyond the reach of the paralyzing influences of corrupt politicians, who would swell the cost of the canal to twice the sum necessary.

The Monroe doctrine, substantially stated, is an official declaration that the United States would consider the attempt of any European Government to establish itself, by colonization or otherwise, on the Central American Isthmus, and thus force our commerce with California and the Pacific Ocean to the humiliating condition of passing the Isthmus under foreign guns, as a hostile and unfriendly act, which would, sooner or later, lead to war, and hence should be opposed by all Americans.

We have also the celebrated "Clayton-Bulwer Treaty," by which the English and United States Governments have solemnly bound themselves not to "occupy, fortify, or possess" any portion of Central America, thus preventing those two Governments from acquiring a foot of land on the Isthmus, upon which to float a flag or mount a gun.

In order to preserve the neutrality of the Isthmus, no American citizen can object to maintaining the above doctrine and treaty; but they have no application whatever to the great and

philanthropic project of M. de Lesseps, as he has again and again declared that the Canal will be international in its character, and instead of inviting Government aid he declines it, and thus pays the highest respect to the Monroe doctrine.

In addition to the United States and Great Britain being bound by treaty obligations to keep off the Isthmus, the French Government, to remove all doubts of her policy, have promptly informed Mr. Evarts, our Secretary of State, that France has no direct or indirect interest of any character in M. de Lesseps's enterprise, or the company that may be organized to put it into successful operation. This ought, and doubtless will, satisfy every candid and intelligent American that France, who gave us moral and material aid in the dark and trying days of the Revolution, remains true to her traditional policy of maintaining friendly relations with the people of this country, and has no disposition to interfere with the Monroe doctrine.

How the act of M. de Lesseps or any other person, without government aid, going to the Isthmus and building a ship-canal with laborers, machinery, supplies, and money procured in all accessible countries, and when finished dismissing and sending them home, leaving only a few agents to keep the works in order, can be construed into an infringement of the Monroe doctrine is beyond my comprehension; therefore I will leave it for others to explain, who may understand the subject better.

It should be borne in mind that the United States of Colombia, a free and independent state, have generously given, by virtue of a valid concession, the exclusive right to build a canal through her undisputed territory, and so long as M. de Lesseps, or the company that may be organized, continues without government aid, the United States have no moral or legal right to interfere with the prosecution of the work; and, were they to do so, it is my solemn conviction that the chief maritime powers of Europe would justly unite to protect the company in building the canal, as their commerce is fully equal to if not more largely and deeply interested in its completion than ours.

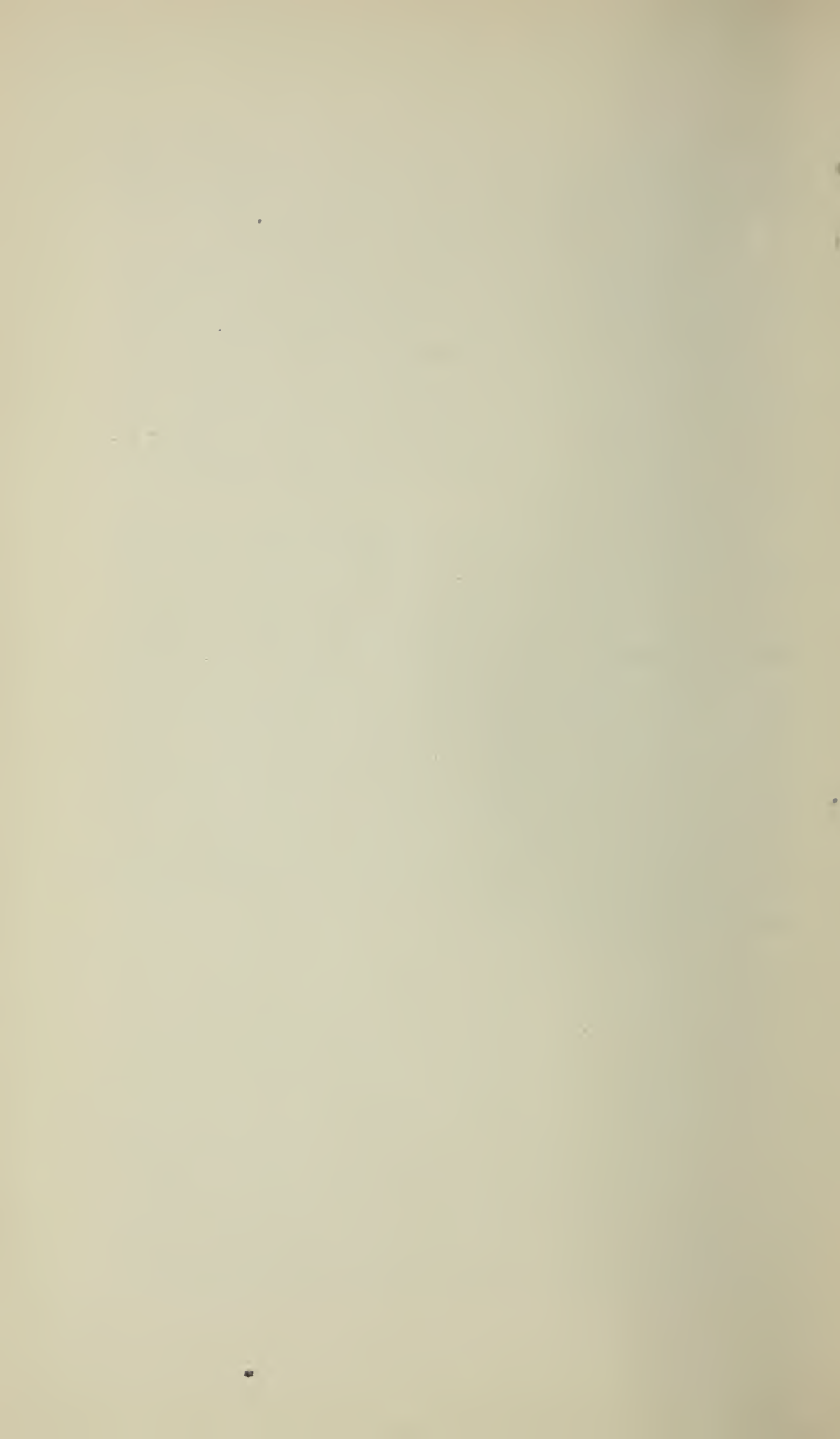
Since the wise decision of the Paris Congress in favor of a short sea-level canal, I have noticed with pain and regret the efforts of rival promoters to throw discredit upon the integrity of the Congress, and prejudice public sentiment in this country

against the Panama Canal ; but it is gratifying to see that the plain, practical common sense of the American people, who believe in cheap and rapid transits, are looking more seriously into the question, and, I believe, will give it their support.

The United States, occupying a commanding position and standing in the front rank of civilized nations, can well afford to aid and look with feelings of pride and confidence in the execution of a work which will greatly increase the mechanical, agricultural, and commercial interests of our country, from Maine to Texas, even if the company is organized in Paris under French laws, which carefully protect the rights of stockholders, and rigidly holds the conduct of its officers and agents to the strictest accountability.

The canal company, enjoying a monopoly of the ocean trade, with its neutrality guaranteed by the great powers, will become the most safe, reliable, and best-paying stock in the world.

Wars may follow wars, shaking the earth with the mighty tread of desolating armies ; republics, kingdoms, and empires may fall, overturning the foundations of social, religious, and political order ; pestilences, famines, and earthquakes may carry destruction and death to the hearts and homes of our fellow men ; but the Canal, from its isolated position, will remain undisturbed and continue to pass quickly and safely between the two oceans the commerce of all nations, and, giving joy to weather-beaten sailors, they will make the Cordilleras ring with songs of triumph at being able to abandon the long and stormy Cape routes for ever.





3 0112 061935885